DOCUMENT RESUME

ED 040 886 24 SE 009 298

AUTHOR Tate, Merle W.; Hyer, Leon A.
TITLE Significance Values for an Exact Multinomial Test and Accuracy of the Chi-Square Approximation, Final Report.
INSTITUTION Lehigh Univ., Bethlehem, Pa.
SPONS AGENCY Office of Education (DHEW), Washington, D.C. Bureau of Research.
BUREAU NO BR-8-B-023
PUB DATE Aug 69
GRANT OEG-0-8-080023-3696(010)
NOTE 75p.

EDRS PRICE EDRS Price MF-$0.50 HC-$3.85
DESCRIPTORS Educational Research, Research, *Statistical Analysis, *Statistical Studies, *Statistics, Tests of Significance

ABSTRACT

The purposes of this study were to tabulate the exact cumulative probabilities for a multinomial such that expected frequencies vary from 1 to not less than 5 in the case where the expected frequencies are equal and to study the accuracy of the conventional chi-square goodness-of-fit test. The tables of cumulative probabilities provide exact tests of goodness-of-fit in small samples. They also serve as criteria for approximations to the multinomial other than the conventional chi-square test or as criteria for the effectiveness of corrections for that test. (Author/FL)

ED040886

BR-8-B-023
PA 24
SE

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

FINAL REPORT

Project No. 8-B-023

Grant No. OEG-0-8-080023-3696(010)

SIGNIFICANCE VALUES FOR AN EXACT MULTINOMIAL TEST AND ACCURACY OF THE CHI-SQUARE APPROXIMATION

Merle W. Tate
Leon A. Hyer

Lehigh University

Bethlehem, Pennsylvania

August 1969

The research reported herein was performed pursuant to a grant with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

SE 009 288

FOREWORD

The purposes of this study were (1) to tabulate the exact cumulative probabilities for the multinomial $(\varphi_1+ \varphi_2+\ldots+\varphi_k)^N$, k=3,4,5,6,7 and N's such that expected frequencies varied from 1 to not less than 5 in the special case where the expected frequencies are equal and (2) to study the accuracy of the conventional chi-square goodness-of-fit test.

We had originally intended to include only the probabilities for the multinomials, k=3,4,5 and N's yielding expected frequencies not more than 5. The intention originated in the numerous times we have read or been told--and in turn have advised others--that the chi-square test is satisfactory when the expected frequencies are not less than 5 and degrees of freedom 2 or more. As we went along, it became increasingly clear that the advice was less than sound. Consequently we expanded the study as indicated above.

The tabled probabilities should be useful, not only in providing exact tests of goodness-of-fit in small samples, but as criteria for approximations to the multinomial other than the conventional chi-square test or as criteria for the effectiveness of corrections for that test.

We are indebted to Adnan Erginel for much of the computational work and for checking computations; to David March for the computer program for developing multinomial distributions; to Eileen Hyer for help in preparing tables; and to Linda Boehm for typing the manuscript for offset printing. We are grateful to them.

CONTENTS

FOREWORD ii

SUMMARY 1

THE MULTINOMIAL DISTRIBUTION 3

Construction of the Multinomial Distribution 3

THE EXACT MULTINOMIAL TEST OF SIGNIFICANCE 6

Use of Tables of Significance Values 6

THE CHI-SQUARE APPROXIMATION TO THE MULTINOMIAL 8

Accuracy of the Chi-Square Approximation 8

THE MULTINOMIAL WITH UNEQUAL PARAMETERS 17

CORRECTIONS FOR X^2 19

SUBSTITUTE TESTS 20

The Kolmogorov-Smirnov Test 20

CONCLUDING REMARKS 21

REFERENCES 22

TABLES OF SIGNIFICANCE VALUES

Outcomes and Corresponding Significance Levels ($.005 \leqslant P \leqslant .205$) in the Multinomials, N=3,4,...,30; k=3; $\varphi_i = 1/3$ for Each $\underline{i}$ 25

Outcomes and Corresponding Significance Levels ($.005 \leqslant P \leqslant .205$) in the Multinomials, N=4,5,...,25; k=4; $\varphi_i = 1/4$ for Each $\underline{i}$ 28

Outcomes and Corresponding Significance Levels ($.005 \leqslant P \leqslant .205$) in the Multinomials, N=5,6,...,25; k=5; $\varphi_i = 1/5$ for Each $\underline{i}$ 32

Outcomes and Corresponding Significance Levels ($.005 \leqslant P \leqslant .205$) in the Multinomials, N=6,7,...,30; k=6; $\varphi_i = 1/6$ for Each $\underline{i}$ 39

Outcomes and Corresponding Significance Levels ($.005 \leqslant P \leqslant .205$) in the Multinomials, N=7,8,...,28; k=7; $\varphi_i = 1/7$ for Each $\underline{i}$ 56

SUMMARY

The most widely used test of the hypothesis that the parameters of a multinomial population have some specified value is the X^2 test. It is well known that, when the expected frequencies are large, the X^2 statistic is distributed approximately as chi-square with k-1 degrees of freedom, where k is the number of categories. This is the simplest of the familiar chi-square goodness-of-fit tests; indeed, the simplest of the various tests which turn on chi-square probabilities.

There has been relatively little study of the question of how large expected frequencies should be to justify the chi-square approximation; in applied statistics the question is usually disposed of by rules-of-thumb. The most common is the not-less-than-five rule, which no doubt originated in the experience that, when expectations are about five or more, the binomial distribution usually is well fitted by the normal curve.

In this study 126 multinomial distributions were constructed, with k varying from 3 to 7 and N's such that expectations ranged from 1 to not less than 5, with parameters each equal to 1/k. The exact cumulative probability and the chi-square probability of X^2 of each outcome were calculated. For 118 of the 126 distributions, the cumulative probabilities of outcomes having probabilities between .005 and .205 were tabled. These permit exact tests of the hypothesis that the multinomial parameters are equal for the N's and k's included.

The exact multinomial and corresponding chi-square probabilities were compared in two ways. First, the absolute percentage errors of the chi-square probabilities and the numbers of times they underestimated and overestimated the exact probabilities were calculated in the .005-.009, .010-.050, .051-.100, .101-.150, and .151-.205 regions. Similar comparisons were made in 36 multinomial distributions, with k=3 and N varying from 4 to 12, with parameters not equal.

Second, the extent of agreement between the exact and chi-square probabilities at conventional regions in 18 representative distributions was determined by tabulating the exact and corresponding chi-square probabilities in correlation tables with classes <.010, .010-.050, .051-.100, and >.100 in both directions.

The comparisons showed that--

1. The mean absolute percentage errors in the chi-square approxi-

mation decreased as the multinomial probabilities increased over the .005-.205 region. They were greatest by far in the .005-.009 region.

2. The median of the means of absolute percentage errors was 49 over the .005-.205 region. At the .010-.050 region it was 56; at the .051-.100 region, 36; in the two regions combined, 44.
3. There was indifferent relationship between mean errors and expected frequencies when the latter were fewer than about 10. In fact, the largest errors occurred when the expected frequencies were 5 or thereabout.
4. When the expected frequencies were 5 or fewer, the mean errors increased as the number of categories increased.
5. There was little if any bias in the chi-square approximation. The numbers of underestimates and overestimates of the exact probabilities were not very different.
6. The errors in the approximation were considerably larger in the distributions with parameters not equal, but the patterns were similar to the patterns of the errors in the distributions having equal parameters.
7. The median percentage agreement between the exact and chi-square probabilities in the regions, $<.010$, .010-.050, .051-.100, and $>.100$, was 68. That is, on the average, the probabilities fell in the same region about two-thirds of the time. Considering only the two regions, .050 or less and .051 or more, the percentage agreement was not less than 76 in any of the 18 distributions. In all but three distributions, the percentage was 85 or more.

The tables of cumulative probabilities or significance levels should prove useful, not only in testing a hypothesis that the parameters of a multinomial population are equal, but as criteria for approximations other than X^2 to the multinomial.

Judging from the multinomial distributions examined in this study, if close approximations to exact probabilities are needed, the X^2 test is not satisfactory when expectations are fewer than about 10, and even when they are more than 10 the approximation may at times be poor. On the other hand, if one is interested only in whether the cumulative probability associated with an outcome in a multinomial distribution is less than or greater than .05, the X^2 test performs reasonably well with expectations as small as one.

THE MULTINOMIAL DISTRIBUTION

The general term of the multinomial $(\varphi_1 + \varphi_2 + \ldots + \varphi_k)^N$ may be written

$$P(n_1, n_2, \ldots, n_k) = \frac{N!}{n_1! n_2! \ldots n_k!} \varphi_1^{n_1} \varphi_2^{n_2} \ldots \varphi_k^{n_k}. \qquad (1)$$

This term gives the probability that N items fall in k categories with frequencies $n_1, n_2, \ldots, n_k$ ($\Sigma_i n_i = N$) where the probability is φ_i that any item falls in the $i^{\underline{th}}$ category ($\Sigma_i \varphi_i = 1$). In the special case where k=2, Equation (1) reduces to the general term of the familiar binomial $(\varphi_1 + \varphi_2)^N$.

Although several tables of the binomial probabilities are available, e.g., Aiken (1955), there are no tables of the multinomial. There are two reasons for the lack. First, there are too many parameters in the general case to permit construction of manageable tables. Second, although the expansion of the multinomial presents no special problems, it is laborious unless N is very small. However, in the special case where the φ_i are all equal, both the size of the tables and the labor are greatly reduced.

Construction of the Multinomial Distribution. Consider a three-fold population in which one-third of the members have Character A, one-third Character B, and one-third Character C. In a sample of 4, there are 15 possible outcomes. These, their frequencies (multinomial coefficients), and their probabilities, as obtained from the expansion of $(\varphi_1 + \varphi_2 + \varphi_3)^4$ in which the φ_i are each equal to 1/3, are shown in Table 1. The probabilities are obtained from Equation (1). For example, the probability of the outcome 2-0-2 is

$$P\ (2,0,2) = \frac{4!}{2!0!2!} (1/3)^2 (1/3)^0 (1/3)^2 = 6(1/3)^4 = .0741.$$

Since the φ_i are equal in the above example, there is no need to distinguish between different arrangements of similar outcomes. Hence, the distribution may be summarized, as in Table 2.

The distinction between the probability of an outcome and its gross probability has been the source of some confusion in tests of significance. We return to the matter later.

Table 1. Outcomes, coefficients, and probabilities in the multinomial distribution, N=4, k=3, and the φ_i equal.

Outcome A B C	Coefficient	Probability
4 0 0	1	.0123
0 4 0	1	.0123
0 0 4	1	.0123
3 1 0	4	.0494
3 0 1	4	.0494
1 3 0	4	.0494
0 3 1	4	.0494
1 0 3	4	.0494
0 1 3	4	.0494
2 2 0	6	.0741
2 0 2	6	.0741
0 2 2	6	.0741
2 1 1	12	.1482
1 2 1	12	.1482
1 1 2	12	.1482

Table 2. Summary of the distribution of Table 1.

Outcome	Coefficient	Number of Terms (Permutations)	Probability of Outcome	Gross Probability
4 0 0	1	3	.0123	.037
3 1 0	4	6	.0494	.296
2 2 0	6	3	.0741	.222
2 1 1	12	3	.1482	.445

The procedure for constructing a multinomial distribution, when the φ_i are equal, is relatively simple. Consider the multinomial $(\varphi_1 + \varphi_2 + \varphi_3 + \varphi_4)^N$ where N=8, k=4, and the φ_i are each equal to 1/4. The distribution is shown in Table 3, the outcomes arranged in order of the corresponding coefficients.

The outcomes are written by considering the partitions of N into k or fewer parts; the coefficients by considering the number of ways a group of N items can be distributed in k categories with frequency-in-category as indicated by the digits in the corresponding outcomes; and the number of terms having a given coefficient by considering the number of distinguishable arrangements that can be made from the k digits. The probability of a given outcome is obtained by dividing the product of the coefficient of the outcome times the number of terms by the total

Table 3. The multinomial distribution, N=8, k=4, and the φ_i equal.

Outcome	Coefficient	Number of terms	Frequency	Cumulative frequency	Cumulative probability
8 0 0 0	1	4	4	4	.000
7 1 0 0	8	12	96	100	.002
6 2 0 0	28	12	336	436	.007
6 1 1 0	56	12	672	1,108	.017
5 3 0 0	56	12	672	1,780	.027
4 4 0 0	70	6	420	2,200	.034
5 2 1 0	168	24	4,032	6,232	.095
4 3 1 0	280	24	6,720	12,952	.198
5 1 1 1	336	4	1,344	14,296	.218
4 2 2 0	420	12	5,040	19,336	.295
3 3 2 0	560	12	6,720	26,056	.398
4 2 1 1	840	12	10,080	36,136	.551
3 3 1 1	1,120	6	6,720	42,856	.654
3 2 2 1	1,680	12	20,160	63,016	.962
2 2 2 2	2,520	1	2,520	65,536	1.000

number of cases, the latter being equal to k^N.

The amount of work builds up rapidly as the number of categories k and sample size N increase. For example, when there are 4 categories and a sample of 12, 34 outcomes, 455 terms, and 16,777,216 cases are generated. When there are 5 categories and a sample of 15, 84 outcomes, 3,876 terms, and 30,517,578,125 cases are generated. However, it is possible, by use of logarithms and log factorials, to reduce the procedures to desk-calculator size without material loss of accuracy. To illustrate, the outcome 7-2-2-1 in the multinomial $(\varphi_1 + \varphi_2 + \varphi_3 + \varphi_4)^{12}$ with the φ_i each equal to 1/4, has a coefficient of $12!/7!2!2!1!$. There are $4!/1!2!1!$ terms having the coefficient, and a total of $(4)^{12}$ cases in the expansion. Hence,

$$\log P(7,2,2,1) = \log 12! - \log 7! - \log 2! - \log 2! + \log 4! - \log 2! - 12 \log 4 = \bar{2}.23031,$$

so that P(7,2,2,1) = .01695. Computed arithmetically, the figure is .01699.

It is also possible to program the procedures for the digital computer. One program has been written by March (1968).

THE EXACT MULTINOMIAL TEST OF SIGNIFICANCE

Neyman and Pearson (1931), El Shanawany (1936), Smith and Duncan (1945), Tate and Clelland (1957), Chapanis (1962), and Wise (1963) illustrate the use of the multinomial distribution in judging whether a sample of categorical data are fitted satisfactorily by a theoretical or hypothesized distribution. The procedures of Neyman and Pearson, El Shanawany, Smith and Duncan, Tate and Clelland, and Wise, in essential agreement, are concisely described by Gurian, Cornfield, and Mosimann (1964, p. 410):

1. Calculate the probability, under the null hypothesis, of each outcome $[n_1, n_2, \ldots, n_k]$ using the multinomial frequency distribution.
2. Rank the outcomes by their probabilities.
3. Add the probabilities, beginning with the smallest. This cumulative probability gives for each outcome the probability of an outcome at most as probable as the given outcome.
4. Reject the null hypothesis at the α level, if the cumulative probability corresponding to the outcome obtained is equal to or less than α.

The null hypothesis is, of course, that of the familiar goodness-of-fit test, i.e., that the φ_i have values specified by the theory or hypothesis. Its rejection leads to the conclusion that the hypothesized distribution is not parent to the sample data, or, more precisely, that at least one of the φ_i is not as specified.

Chapanis's procedure, limited to the hypothesis that all φ_i are equal, differs from the above in that Chapanis considers all simple outcomes that are permutations of the same k digits as a single event and ranks the events according to their probabilities. The difference between the procedures may be seen in the summary distribution of Table 2. Considered as events, the six permutations of 3-1-0 and the three permutations of 2-2-0 have probabilities of .296 and .222, respectively. Thus, as judged by the gross probabilities, the outcome 2-2-0 is less probable than the outcome 3-1-0, although the latter clearly differs more from expectation. The procedure has been criticized by Gridgeman (1964) on the ground that it leads to inconsistent results and by Gurian, Cornfield, and Mosimann (1964) on the grounds that it is not in general admissible and tends to lack power against all alternatives.

Use of Tables of Significance Values. An important class of null hypotheses involving the multinomial distribution are those that assert that the parameters φ_i are equal, each equal to 1/k. In symbols,

H_o: $\varphi_1 = \varphi_2 = \ldots = \varphi_k = 1/k$. Such hypotheses may readily be tested by use of Tables 12-16, pp.25-72, for the included categories and sample sizes.

Suppose one has a random sample of 15 in five categories, with frequencies in categories of 1, 0, 6, 5, 3 (the order is immaterial) and wishes to know whether it is reasonable to believe that the population proportions, the φ_i, are equal. The hypothesis to be tested is H_o: $\varphi_1 = \varphi_2 = \varphi_3 = \varphi_4 = \varphi_5 = 1/5$ against the alternative that one or more inequalities exist. Turning to Table 14, we find that the probability corresponding to the outcome 6-5-3-1-0 is .043. This is the cumulative probability referred to in Step 3 of the procedure summarized above. Hence, the null hypothesis may be rejected at the 4.3 per cent level.

In using the tables, it is to be remembered that the order of frequencies in categories is immaterial. The outcome 6-5-3-1-0 has the same probability, if the null hypothesis is true, as the outcome 1-0-6-5-3 or any other outcome consisting of another arrangement of the five digits.

When order is meaningful, it is possible to combine a multinomial probability with the probability resulting from a test on order by Fisher's method of combining probabilities from independent tests of significance. For example, suppose that in a sample of 16, the frequencies falling in categories ordered from 1 to 4 are 1, 2, 6, 7, respectively. According to Table 13, the outcome has a cumulative probability of .095. The coefficient of correlation between category order and ranked frequencies is 1.00, and a coefficient of ± 1.00 has a probability of .083. We may think of the multinomial test in this situation as a test of independence between categories and frequencies, and the rank coefficient as an independent test of the same hypothesis. Combining the P values, .095 and .083, we obtain a probability of .045 and thus have considerable reason to doubt that the frequencies are independent of categories or, equivalently, that the parameters, the φ_i, are each equal to 1/4.

Tables 12-16 include all of the outcomes associated with cumulative probabilities between .005 and .205. More extreme outcomes than those included in the tables have probabilities less than .005; less extreme outcomes, probabilities greater than .205. It should be pointed out that occasionally more extreme or less extreme outcomes, as judged by X^2, are not included. This is because their multinomial probabilities are less than .005 or greater than .205. The cumulative probability of the outcome 11-4-2-2-1 in the multinomial (N=20; k=5; φ_i equal), for example, is .0067, while that of the outcome 7-7-6-0-0 is .0012, although the

X^2 value of the former is 16.5, that of the latter 13.5. At the other end, the outcome 5-5-5-5-0 has a cumulative probability of .136, while the outcome 8-5-3-2-2 has a cumulative probability of .226, although their respective X^2 values are 5.00 and 6.50.

THE CHI-SQUARE APPROXIMATION TO THE MULTINOMIAL

In the conventional goodness-of-fit test, with expected frequencies depending only on the size of the sample and the hypothesis to be tested, the quantity,

$$X^2 = \sum_i \frac{(n_i - N\varphi_i)^2}{N\varphi_i} = \sum_i \frac{(O_i - E_i)^2}{E_i} \qquad (2)$$

where the O_i and E_i are the observed and expected frequencies respectively in the $i^{\underline{th}}$ category (i=1,2...,k), is referred to the chi-square table at k-1 degrees of freedom. The accuracy of the results depends on the size of the E_i and, unless the E_i are large, on the probability level. It is well known that the results tend to be better at, say, the .05 level than at the .01 level, when the E_i are not large.

The use of chi-square in place of the multinomial involves at least two types of errors, one arising from the approximations that are made in deriving the chi-square function from the multinomial, the other from the fact that the former is a continuous function, while the latter is discrete.

Since Pearson's paper (1900), which served to extend Helmert's chi-square distribution to frequency data [Wolfenden (1942)], there have been several proofs that the X^2 of Equation (2) is distributed approximately as chi-square, i.e., that the latter is the limiting distribution as the E_i approach infinity. All of the proofs, including Pearson's, assume at some point that the observed frequencies, the O_i, are distributed normally about the expected frequency E_i in the $i^{\underline{th}}$ category. This means of course that the E_i must be enough greater than zero to preclude positive skewness and large enough to temper discreteness.

The perennial question in the application of chi-square to frequency data is that of how large the E_i must be to make the assumption of normality in categories tenable.

Accuracy of the Chi-Square Approximation. The computer program

[March (1968)] for constructing the multinomial distributions, from which the majority of the significance values (cumulative probabilities) of Tables 12-16 were obtained, included the calculation of X^2 for each outcome, the corresponding chi-square probability, the difference between the chi-square and multinomial probabilities, and the percentage error in the former as determined by $100[P(X^2) - P(M)]/P(M)$ where $P(X^2)$ and $P(M)$ are the cumulative chi-square and multinomial probabilities, respectively. The mean absolute percentage errors and the numbers of underestimates and overestimates in selected regions are shown in Tables 4, 5, 6, 7, and 8. In Table 4, for example, at row N=15 and the .005-.009 region, there were one underestimate and one overestimate giving

Table 4. Means of absolute percentage errors and numbers of underestimates* and overestimates* at selected regions in the chi-square approximations to the multinomials, N=3,4,...,30, 40,50,60,70,80; k=3; φ_i=1/3 for each i.

N	Region .005-.009	.010-.050	.051-.100	.101-.150	.151-.205	Mean
3	-	-	-	55%(1-)	-	55%
4	-	51%(1-)	-	-	-	51
5	-	45 (1-)	-	45 (1-)	-	45
6	-	-	44%(1-)	-	24%(1-)	34
7	-	42 (1-)	15 (1-)	-	10 (1-)	22
8	40%(1-)	10 (1-)	10 (1)	32 (2-)	-	25
9	-	11 (3-)	9 (1)	-	41 (1-)	17
10	2 (1-)	25 (1-)(2)	48 (1-)(1)	-	16 (1-)	27
11	-	50 (3)	41 (2-)	22 (1-)	-	42
12	-	61 (1-)(3)	29 (2-)	8 (1-)	2 (1-)	39
13	52 (1-)	64 (2-)(2)	11 (2-)	19 (1)	46 (1-)	44
14	119 (1)	84 (3-)(2)	35 (1-)(1)	2 (1-)	19 (1-)	63
15	131 (1-)(1)	47 (4-)(1)	23 (2)	28 (2-)	9 (1-)	51
16	172 (2)	28 (3-)(2)	39 (2-)	9 (1-)	9 (1)	53
17	40 (2-)	34 (3-)(3)	16 (1-)(1)	38 (1-)	5 (1-)	30
18	7 (1-)	45 (3-)(3)	17 (2-)	13 (2)	26 (2-)	30
19	47 (2-)(1)	51 (3-)(3)	25 (2)	37 (2-)	10 (1-)	42
20	97 (2)	38 (4-)(2)	24 (1-)(2)	16 (2-)	11 (1-)	38
21	92 (1-)(3)	33 (4-)(2)	25 (2-)(1)	8 (1-)(1)	10 (1)	42
22	92 (1-)(2)	30 (3-)(4)	20 (2-)(1)	11 (2-)	33 (1-)	38
23	80 (2-)(2)	37 (4-)(3)	24 (2-)(1)	8 (1-)(2)	14 (1-)	38
24	38 (2-)(1)	38 (5-)(4)	20 (1-)(2)	15 (2-)	6 (1)	31
25	51 (2-)(1)	33 (5-)(3)	19 (2-)(2)	14 (1)	17 (3-)	29
26	60 (1-)(2)	44 (4-)(5)	25 (3-)(1)	10 (1-)(2)	14 (1-)	36
27	79 (2-)(3)	33 (4-)(4)	15 (3-)(1)	19 (1-)(1)	14 (2-)	37
28	56 (1-)(3)	32 (6-)(3)	15 (1-)(3)	21 (2-)	14 (1-)(1)	31
29	27 (3-)(1)	37 (5-)(4)	21 (2-)(2)	11 (3-)	2 (2)	26
30	42 (2-)(2)	33 (5-)(5)	21 (4-)(1)	11 (2)	20 (2-)	29
40	35 (3-)(3)	29 (7-)(6)	18 (3-)(3)	15 (2-)(1)	8 (1-)(2)	25
50	40 (3-)(5)	23 (9-)(8)	13 (3-)(3)	11 (4-)(1)	5 (3-)(1)	22

Table 4. (Continued)

N	.005-.009	.010-.050	Region .051-.100	.101-.150	.151-.205	Mean
60	36 (5-)(4)	22 (10-)(10)	12 (4-)(4)	8 (3-)(3)	11 (3-)	20
70	25 (6-)(4)	21 (12-)(12)	11 (6-)(4)	11 (4-)(2)	9 (2-)(3)	18
80	31 (7-)(6)	18 (14-)(13)	11 (6-)(4)	8 (4-)(4)	4 (3-)(2)	17

* Numbers in parentheses. Underestimates are indicated by negative signs. A bar,-, means that there are no cumulative multinomial probabilities in the region.

Table 5. Means of absolute percentage errors and numbers of underestimates* and overestimates* at selected regions in the chi-square approximations to the multinomials, N=4, 5,...,25, 40; k=4; φ_i=1/4 for each i.

N	.005-.009	.010-.050	Region .051-.100	.101-.150	.151-.205	Mean
4	-	53%(1-)	-	-	45%(1-)	49%
5	-	-	44%(1-)	-	19 (1-)	32
6	-	46 (1-)	11 (1-)(1)	-	38 (1-)	26
7	49%(1-)	23 (2)	51 (1-)	-	-	36
8	11 (1)	56 (1-)(2)	24 (1-)	-	13 (1-)	36
9	32 (1-)(1)	54 (1-)(1)	30 (1-)(1)	7% (1)	17 (1-)	32
10	153 (2)	24 (2-)(1)	25 (1-)(1)	14 (1)	31 (1-)(1)	50
11	49 (2-)	16 (4)	23 (2-)	31 (2)	35 (1-)(1)	28
12	5 (2-)	42 (2-)(2)	35 (1-)(3)	38 (1-)	30 (2-)(2)	32
13	49 (1-)(1)	55 (3-)(4)	40 (1-)(2)	46 (1-)(2)	37 (2-)	48
14	46 (1-)(1)	48 (3-)(5)	36 (2-)(3)	49 (2-)(1)	13 (1-)	43
15	38 (2-)(2)	50 (3-)(6)	64 (3-)(3)	6 (1-)(1)	27 (2-)	46
16	88 (1-)(2)	60 (4-)(8)	59 (4-)(2)	18 (2-)	11 (2)	56
17	69 (3-)(2)	84 (4-)(9)	17 (4-)(1)	17 (1-)(2)	12 (1-)(2)	55
18	60 (1-)(5)	90 (7-)(7)	19 (4-)(2)	18 (3-)(1)	25 (1-)(2)	57
19	99 (2-)(4)	75 (7-)(9)	26 (3-)(3)	27 (1-)(3)	35 (1-)(2)	62
20	102 (3-)(3)	78 (9-)(9)	21 (2-)(5)	32 (2-)(2)	25 (2-)(1)	62
21	108 (2-)(5)	81 (9-)(11)	40 (2-)(4)	24 (4-)(2)	13 (3-)	67
22	130 (3-)(6)	62 (10-)(11)	34 (4-)(4)	32 (4-)(1)	5 (3)	63
23	147 (4-)(5)	62 (10-)(11)	38 (5-)(5)	23 (4-)(1)	14 (1-)(2)	66
24	156 (5-)(8)	37 (8-)(13)	36 (6-)(5)	14 (1-)(4)	26 (2-)	64
25	131 (3-)(8)	46 (11-)(13)	27 (7-)(4)	23 (2-)(2)	18 (3-)(2)	55
40	76 (8-)(15)	43 (20-)(30)	17 (11-)(10)	23 (5-)(7)	11 (5-)(3)	41

* Numbers in parentheses. Underestimates are indicated by negative signs. A bar,-, means that there are no cumulative multinomial probabilities in the region.

a mean percentage error, disregarding sign, of 131; in the .010-.050 region, there were four underestimates and one overestimate giving a mean

Table 6. Means of absolute percentage errors and numbers of underestimates* and overestimates* at selected regions in the chi-square approximation to the multinomials, N=5, 6,...,25, 50; k=5; φ_i=1/5 for each i.

N	Region .005-.009	.010-.050	.051-.100	.101-.150	.151-.205	Mean
5	-	48%(1-)	6%(1-)	-	-	27%
6	56%(1-)	33 (2)	37 (1-)	-	-	40
7	14 (1)	63 (1-)(1)	-	19%(1-)	4%(1-)	33
8	88 (1-)(1)	40 (1-)(1)	26 (1-)(1)	5 (1)	27 (1)	42
9	-	35 (2-)(2)	21 (1-)(1)	37 (1-)(1)	-	32
10	40 (1-)	26 (1-)(2)	61 (1-)(3)	28 (2-)(1)	22 (1-)	39
11	66 (2)	48 (3-)(3)	49 (1-)(2)	-	29 (2-)	48
12	47 (2-)(1)	59 (3-)(7)	13 (1-)	8 (2)	28 (1-)(2)	44
13	101 (3)	67 (4-)(5)	28 (2-)(3)	21 (2-)(2)	24 (2)	51
14	67 (2-)(2)	75 (5-)(6)	29 (2-)(3)	27 (1-)(4)	43 (1-)	54
15	136 (2-)(5)	47 (6-)(6)	35 (3-)(5)	28 (1-)(1)	34 (2-)(3)	59
16	121 (4-)(3)	40 (5-)(9)	37 (4-)(4)	45 (3-)(2)	35 (2-)(2)	54
17	37 (4-)(2)	48 (7-)(11)	45 (4-)(5)	36 (4-)(3)	36 (4-)(3)	42
18	47 (3-)(6)	55 (8-)(11)	46 (6-)(6)	26 (2-)(3)	45 (3-)(4)	47
19	67 (5-)(5)	58 (10-)(14)	47 (6-)(7)	58 (3-)(3)	29 (5-)(1)	54
20	54 (2-)(6)	59 (11-)(21)	60 (6-)(8)	52 (5-)(2)	16 (4-)(2)	54
21	80 (5-)(8)	56 (13-)(21)	65 (7-)(7)	25 (4-)(5)	20 (5-)(2)	55
22	74 (8-)(9)	67 (13-)(24)	56 (8-)(9)	24 (6-)(2)	15 (3-)(4)	58
23	69 (8-)(9)	79 (16-)(27)	49 (11-)(7)	18 (6-)(2)	22 (4-)(4)	61
24	89 (6-)(12)	78 (22-)(26)	48 (11-)(9)	16 (3-)(5)	22 (3-)(5)	65
25	93 (9-)(13)	85 (23-)(29)	33 (10-)(10)	25 (5-)(5)	24 (4-)(6)	67
50	80 (44-)(63)	48 (96-)(115)	29 (36-)(39)	19 (24-)(18)	15 (14-)(17)	47

* Numbers in parentheses. Underestimates are indicated by negative signs. A bar,-, means that there are no cumulative multinomial probabilities in the region.

absolute percentage error of 47; and so on. The figure, 51, in the last column is the mean of the 12 absolute percentage errors over the entire .005-.205 region. All rows in the five tables are read similarly.

The means of the columns of percentage errors, not shown in the tables, decrease as probabilities increase. In Table 5, for example, reading across, the means are 99, 58, 31, 25, and 21. Roughly similar decreases occur in the other tables. Thus, as expected, the chi-square approximation improved as the cumulative multinomial probabilities increased over the .005-.205 region.

What was not expected was the failure of the approximation to improve as expected frequencies increased. As seen in Table 4, the largest mean error over the .005-.205 region occurs when the expected frequencies are 14/3, and the mean errors do not reflect consistent decrease until the

Table 7. Means of absolute percentage errors and numbers of underestimates* and overestimates* at selected regions in the chi-square approximation to the multinomials, N=6,7,...,30; k=6; φ_i=1/6 for each i.

N	Region .005-.009	.010-.050	.051-.100	.101-.150	.151-.205	Mean
6	-	44% (2)	41%(1-)	-	-	43%
7	93% (1)	59 (1-)	12 (1-)(1)	-	40%(1-)(1)	43
8	-	30 (2-)(1)	38 (2)	-	25 (1-)	32
9	-	46 (1-)(4)	50 (1-)(1)	24%(2-)	7 (1-)	38
10	28 (2)	74 (3-)(3)	18 (1-)(1)	-	22 (1-)(2)	46
11	75 (1-)(2)	66 (2-)(3)	26 (1-)(3)	32 (2-)(2)	23 (1)	48
12	72 (1-)(1)	64 (4-)(5)	50 (1-)(2)	42 (2-)(3)	40 (2-)(1)	55
13	105 (3-)(3)	40 (5-)(5)	45 (2-)(2)	41 (2-)(2)	24 (1-)(2)	54
14	48 (1-)(3)	52 (5-)(8)	57 (4-)(5)	21 (4-)(1)	5 (1-)(1)	45
15	53 (2-)(4)	61 (6-)(10)	48 (4-)(4)	24 (3-)(3)	-	51
16	91 (2-)(6)	66 (10-)(12)	52 (5-)(4)	19 (2-)(4)	29 (1-)(2)	59
17	78 (3-)(5)	76 (12-)(15)	24 (7-)(3)	33 (3-)(4)	28 (2-)(2)	58
18	73 (7-)(5)	85 (10-)(17)	34 (8-)(8)	30 (4-)(5)	36 (3-)(4)	60
19	109 (4-)(8)	70 (17-)(18)	39 (8-)(9)	37 (3-)(6)	31 (5-)(2)	62
20	104 (9-)(10)	70 (17-)(22)	41 (6-)(11)	41 (5-)(5)	28 (6-)(5)	64
21	118 (8-)(11)	59 (18-)(23)	47 (12-)(12)	37 (5-)(8)	34 (4-)(4)	62
22	115 (11-)(12)	53 (20-)(30)	41 (10-)(11)	38 (9-)(7)	39 (6-)(7)	59
23	84 (11-)(14)	56 (24-)(33)	46 (13-)(15)	35 (8-)(8)	39 (6-)(8)	55
24	78 (11-)(17)	61 (28-)(39)	49 (13-)(20)	43 (8-)(7)	38 (10-)(5)	58
25	74 (14-)(17)	63 (32-)(45)	49 (14-)(19)	51 (11-)(9)	32 (10-)(6)	58
26	81 (15-)(18)	63 (36-)(52)	56 (21-)(22)	46 (11-)(9)	22 (8-)(6)	60
27	79 (19-)(25)	68 (38-)(58)	55 (21-)(22)	44 (15-)(9)	20 (8-)(8)	62
28	85 (19-)(25)	70 (48-)(65)	52 (21-)(22)	41 (12-)(14)	19 (9-)(6)	63
29	91 (22-)(34)	70 (52-)(65)	59 (24-)(25)	35 (17-)(12)	19 (8-)(8)	66
30	87 (23-)(35)	77 (60-)(78)	49 (29-)(23)	35 (15-)(13)	21 (7-)(10)	67

* Numbers in parentheses. Underestimates are indicated by negative signs. A bar,-, means that there are no cumulative multinomial probabilities in the region.

expected frequencies are more than 10. In Tables 5, 6, 7, 8, the largest mean errors occur when the expected frequencies are 21/4, 25/5, 30/6, and 35/7, respectively. At the .010-.050 region, the largest mean errors occur when the expected frequencies are 14/3, 18/4, 25/5, 18/6 and 24/7, respectively.

It is ironic that in all distributions the maximum mean percentage error over the .005-.205 region occurred when the expected frequencies were 5 or near 5. The majority of current applied statistics books give the rule-of-thumb "expected frequencies of 5 or more" for using the chi-square approximation to the multinomial.

The most apparent sources of error were the number of outcomes yielding the same X^2, but having varying multinomial probabilities; and, on the

Table 8. Means of absolute percentage errors and numbers of underestimates* and overestimates* at selected regions in the chi-square approximation to the multinomials, N=7,8,...,28, 35; k=7; φ_i=1/7 for each i.

N	Region .005-.009	.010-.050	.051-.100	.101-.150	.151-.205	Mean
7	68%(1-)	16%(1-)	16% (1)	51%(1-)(1)	-	40%
8	30 (1-)	47 (1-)(3)	-	12 (1-)(1)	-	35
9	55 (1-)(1)	53 (1-)(3)	26 (1-)(1)	0 (1)	13% (1)	43
10	96 (1-)(1)	66 (2-)(4)	32 (1-)(1)	31 (2)	45 (2-)(1)	57
11	116 (1-)(1)	30 (3-)(3)	42 (3-)(2)	44 (1-)(1)	-	47
12	33 (2-)	58 (4-)(6)	65 (2-)(2)	6 (1-)(1)	36 (2-)(1)	49
13	54 (2-)(3)	71 (4-)(6)	44 (4-)(3)	26 (2-)(3)	23 (1)	51
14	91 (1-)(5)	76 (6-)(8)	28 (3-)(5)	38 (1-)(2)	32 (4-)(3)	57
15	73 (4-)(2)	69 (8-)(12)	39 (4-)(4)	57 (1-)(2)	32 (3-)(4)	57
16	89 (5-)(5)	69 (10-)(11)	45 (5-)(7)	39 (4-)(4)	68 (1-)(1)	63
17	119 (3-)(10)	60 (13-)(14)	48 (5-)(8)	43 (5-)(4)	35 (2-)(3)	65
18	117 (6-)(6)	57 (17-)(18)	49 (8-)(7)	47 (5-)(6)	22 (4-)(4)	60
19	79 (9-)(8)	66 (17-)(24)	50 (10-)(10)	35 (7-)(5)	27 (4-)(3)	58
20	63 (6-)(8)	70 (24-)(30)	51 (11-)(10)	37 (7-)(6)	24 (7-)(4)	57
21	84 (10-)(12)	71 (28-)(33)	44 (13-)(12)	31 (6-)(6)	29 (4-)(6)	61
22	97 (14-)(15)	72 (31-)(38)	41 (17-)(11)	32 (7-)(8)	31 (8-)(7)	63
23	94 (14-)(19)	74 (37-)(44)	36 (14-)(16)	34 (10-)(10)	36 (6-)(10)	64
24	82 (15-)(17)	77 (47-)(52)	40 (17-)(20)	40 (8-)(12)	36 (10-)(9)	64
25	107 (20-)(26)	71 (48-)(52)	43 (20-)(24)	38 (12-)(13)	31 (12-)(7)	66
26	104 (23-)(24)	69 (55-)(65)	47 (22-)(26)	39 (17-)(14)	34 (10-)(11)	65
27	102 (29-)(31)	68 (61-)(75)	49 (25-)(29)	38 (15-)(18)	35 (13-)(9)	66
28	109 (32-)(35)	65 (64-)(85)	48 (28-)(34)	42 (19-)(17)	25 (15-)(13)	65
35	90 (64-)(80)	72(143-)(174)	53 (58-)(62)	40 (32-)(29)	28 (26-)(22)	67

* Numbers in parentheses. Underestimates are indicated by negative signs. A bar,-, means that there are no cumulative multinomial probabilities in the region.

other hand, the number of outcomes having the same multinomial probability, but yielding varying X^2's. In the multinomial (N=25; k=5), for example, there were seven outcomes, 8-7-7-3-0, 9-7-5-4-0, 9-7-6-2-1, 9-8-4-3-1, 10-6-5-3-1, 10-7-3-3-2, and 11-4-4-3-3, giving an X^2 of 9.20, whose chi-square probability is .056. The cumulative multinomial probabilities of the seven outcomes are .019, .021, .042, .053, .059, .077, and .111, respectively. On the other hand, the three outcomes, 8-7-6-4-0, 9-8-5-2-1, and 10-8-3-2-2, have identical point multinomial probabilities and cumulative probability of .034. Their X^2 values are 8.00, 10.00, and 11.20, with chi-square probabilities .091, .040, and .024, respectively. Such errors become more numerous as N and k increase. In the multinomial (N=30; k=6) there were 13 outcomes yielding an X^2 of 9.6 with chi-square probability of .087. The cumulative multinomial probabilities of the 13

outcomes ranged from .033 to .161. In the same distribution, there were five outcomes having the same point multinomial probability and cumulative probability of .016. The corresponding chi-square probabilities ranged from .010 to .048.

However, as expected frequencies increase, the ranges of the multinomial probabilities of outcomes having identical chi-square probabilities decrease. For example, in the multinomial (N=40; k=4) there were six outcomes having X^2's of 8.60 with chi-square probability of .035. The corresponding multinomial probabilities ranged from .012 to .058. In the multinomial (N=50; k=5) 14 outcomes gave an X^2 of 10.6 with chi-square probability of .031. The range of the corresponding multinomial probabilities was, coincidentally, .012-.058.

The conventional practice in testing a null hypothesis, H_o, is to strongly reject H_o when P is less than some value, often .01; to reject H_o when P is greater than .01, but less than some value, often .05; to accept H_o when P is greater than some value, often .10; and to consider a P between .05 and .10 as neither discrediting nor supporting H_o. The practice suggests determining the extent to which chi-square and multinomial probabilities lead to the same decisions.

The cross tabulations of the chi-square and multinomial or exact probabilities for the multinomial distributions (N=9, 15, 30, 60; k=3) are shown in Table 9. The expected frequencies are 3, 5, 10, and 20 and the mean percentage errors (see Table 4) are 17, 51, 29, and 20, respectively. When N=9, the probabilities agree in 80 per cent of the cases; when N=15, in 67 per cent; when N=30, in 78 per cent; and when N=60, in 87 per cent.

Similar cross tabulations for the distributions (N=9, 18, 25, 50; k=5) are shown in Table 10. The mean percentage errors for the four are 32, 47, 67, and 47, respectively (see Table 6). When N=9, the chi-square and multinomial probabilities agree in 50 per cent of the cases; when N=18, in 67 per cent; when N=25, in 62 per cent; and when N=50, in 72 per cent.

The cross tabulations in Table 10 are fairly representative of the relationship between chi-square and exact probabilities in the multinomials k=4,6,7 and N's associated with small, moderate, and large mean percentage errors. With k=4, the percentages of agreement were 83, 59, 63, and 75 for N's of 11, 13, 23, and 40, respectively; with k=6, the percentages were 83, 52, and 65 for N's of 8, 15, and 30, respectively; with k=7, the percentages were 71, 61, and 69 for N's of 8, 13, and 35, respectively.

Considering only two regions, .050 or less and .051 or more, the chi-

square and multinomial probabilities agreed in not less than 76 per cent of the cases in any of the 18 distributions analyzed above. In all but three distributions, the agreement was 85 per cent or more.

Table 9*. Relationship between chi-square and exact probabilities in conventional regions for the multinomials, N=9, 15, 30, 60; k=3.

Chi-square Probability	N	Exact probability <.010	.010-.050	.051-.100	>.100
<.010	9				
	15	1	1		
	30	3	2		
	60	6			
.010-.050	9		3		
	15	1	4		
	30	1	7	1	
	60	3	20	1	
.051-.100	9			1	1
	15			2	2
	30		1	4	
	60			7	2
>.100	9				
	15				1
	30				4
	60				7

*The table is read: For N=15, one chi-square probability and one multinomial probability mutually fell in the <.010 region; four in .010-.050 region; and so on. The frequencies in the diagonal cells indicate agreement.

The extent of agreement between the chi-square and multinomial probabilities in particular regions is relatively independent of the mean absolute percentage errors of Tables 4-8. Some of the largest percentage errors occurred within a region. For example, if $P(X^2)$ were .030 and P(M) .015, the percentage error would be 100, although the two P's fall in the same region. The same percentage error would result if $P(X^2)$ were .080 and P(M) .040, although the two P's fall in different regions.

Slakter (1966) obtained the empirical sampling distributions of X^2 of Equation (2) when the null hypothesis is true for N's of 10, 25, and 50 and k's providing expected frequencies from 5 (N=50; k=10) to .05 (N=10; k=200). Each empirical distribution was based on 10,000 random

Table 10*. Relationship between chi-square and exact probabilities in conventional regions for the multinomials, N=9, 18, 25, 50; k=5.

Chi-square Probability	N	Exact probability <.010	.010-.050	.051-.100	>.100
>.010	9		1		
	18	7	2		
	25	10	7		
	50	71	26		
.010-.050	9		2		
	18	2	14	3	2
	25	12	33	5	2
	50	36	155	12	
.051-.100	9		1	1	1
	18		3	4	
	25		8	10	
	50		30	48	12
>.100	9			1	1
	18			5	10
	25		4	5	18
	50			15	61

* See footnote, Table 9.

samples. On the basis of comparisons of the empirical distributions with chi-square distributions, he concludes (p. 622),

> . . . this study offers some further evidence on the robustness of the chi-square goodness-of-fit tests . . . when the expected frequencies are small but equal. Indeed, probably one important reason why the . . . modified X^2 statistic . . . fails to improve much if at all . . . is that the [chi-square] approximation is generally so good.

For two reasons Slakter's study is not comparable to the present. First, he compared the empirical distributions of X^2 with tabular chi-square at the .01, .05, and .10 levels, rather than the exact multinomial probabilities with the chi-square probabilities over the entire .005-.205 region. Second, the smallest number of categories he considered was 10. His study does suggest, as does the present, that the accuracy of the chi-square approximation is relatively independent of expectations, when these are small but equal.

THE MULTINOMIAL WITH UNEQUAL PARAMETERS

The construction of the probability distribution for a multinomial with unequal parameters is essentially the same as that described on pp.3-5. It is more laborious, however, since the permutations of each outcome must be considered separately. The gross outcomes are written as before, then each is permuted and the exponents attached.

Consider the multinomial (N=10; k=3; φ_1=.3, φ_2=.5, φ_3=.2). There are 14 gross outcomes, 10-0-0, 9-1-0, . . ., 4-4-2, 4-3-3, and permutations of the 14 yield 66 distinguishable outcomes. The point probability of the outcome 0-6-4 is, by Equation (1),

$$P(0,6,4) = \frac{10!}{0!6!4!} (.3)^0(.5)^6(.2)^4 = .00525.$$

The other 65 point probabilities are obtained similarly, and the outcomes are ranked by their probabilities. The null hypothesis is tested as outlined on p. 6. For example, in the above multinomial the cumulative probability of the outcome 0-6-4 is .037 and the hypothesis, H_o:φ_1=.3, φ_2=.5, φ_3=.2, may be rejected at the 3.7 per cent level in favor of the alternative that at least one of the φ_i is not as hypothesized.

The March Multin Program (1968) is general, and will develop the distribution for any multinomial (N=1,2,...,100; k=1,2,...,15), given computer capability. Although it would not be feasible to construct tables of significance values for the multinomial having one or more parameters different from the others, it is of interest to examine the accuracy of the chi-square approximation to such multinomials. The means of absolute percentage errors and the numbers of underestimates and overestimates over the .005-.205 region for selected multinomials are shown in Table 11. Although the mean errors in the approximation are considerably larger than those where the parameters are equal, there is again indifferent relationship between errors and expected frequencies.

There have been several studies of the accuracy of the chi-square approximation to the multinomial with unequal parameters. Neyman and Pearson (1931) compared multinomial and chi-square probabilities in the distribution, (N=10; k=3, φ_1=0.3, φ_2=0.5, φ_3=0.2). The mean percentage error in the chi-square probabilities was 42 over the .005-.205 region,

Table 11. Means of absolute percentage errors and numbers of underestimates* and overestimates* over the .005-.205 region in the chi-square approximation to the multinomials, k=3 and selected N's and parameters φ_i.

	Parameters φ_i				
N	.10,.25,.65	.10,.35,.55	.25,.25,.50	.30,.50,.20	1/3,1/3,1/3
4	44%(2-)(1)	55%(3-)(3)	58%(3-)(2)	27%(3-)(4)	51%(1-)
5	53 (6-)(3)	37 (6-)(4)	42 (1-)(5)	56 (5-)(5)	45 (2-)
6	50 (1-)(2)	70 (6-)(6)	55 (3-)(4)	65 (5-)(7)	34 (2-)
7	48 (6-)(6)	36 (9-)(6)	48 (5-)(4)	45 (8-)(9)	22 (3-)
8	51 (10-)(5)	49 (9-)(8)	31 (6-)(4)	48 (10-)(10)	25 (4-)(1)
9	45 (9-)(8)	51 (10-)(10)	25 (5-)(7)	37 (10-)(13)	17 (4-)(1)
10	40 (10-)(10)	47 (10-)(13)	26 (6-)(9)	42 (12-)(15)	27 (4-)(3)
11	41 (14-)(10)	51 (14-)(13)	41 (8-)(9)	43 (15-)(16)	42 (3-)(3)
12	47 (12-)(13)	51 (12-)(17)	33 (9-)(11)	40 (15-)(21)	39 (5-)(3)
20				37 (34-)(36)	38 (8-)(6)
Mean	45	49	37	44**	32**

* Numbers in parentheses. Underestimates are indicated by negative signs.
** Exclusive of entry for N=20.

with 12 underestimates and 15 overestimates. They remark (p. 302),

> . . . Whether or no the chi-square approximation will be considered here as satisfactory depends upon the degree of expectation entertained by the reader and the faith he has already placed in the test when dealing with very small samples, but the present authors must confess themselves pleasantly surprised to find so close an agreement in this rather extreme case.

El Shanawany (1936) compared multinomial and chi-square probabilities in two distributions, (N=10,20; k=3; φ_1=0.3, φ_2=0.5, φ_3=0.2). In the first, where N=10, the mean percentage error in the chi-square probabilities in the .005-.205 region was, as noted above, 42, with 12 underestimates and 15 overestimates. For the N of 20, the mean percentage error was 37 with 34 underestimates and 36 overestimates. However, in the 66 comparisons when N=10, El Shanawany found that 60 chi-square probabilities would lead to the same conclusion as the multinomial if one accepted the null hypothesis when P was greater than .05, remained in doubt when P fell between .05 and .01, and rejected the hypothesis when P was less than .01. When N=20, similar agreement between the multinomial and chi-square probabilities occurred in 219 of the 231 comparisons. He

concludes (p. 187)

> . . . It [the table of comparisons] emphasizes again how the conclusions regarding H obtained from using the chi-square approximation would hardly differ from those obtained by the laborious process of calculating and summing the multinomial terms . . . . it must of course be remembered that the foregoing results have been established in two special cases only, where the expected group frequencies were (2,5,3) and (4,10,6) [sic]. For larger expected frequencies better results might be anticipated; it is likely that the approximation will fail if any [expected value] is less than 2 and N much less than 10.

Van Der Waerden (1957) compared multinomial and chi-square probabilities in two distributions (N=10; k=3; φ_1=0.5, φ_2=0.3, φ_3=0.2) and (N=10; k=3; φ_i equal), and found reasonably good agreement between the probabilities. Although he suggested caution in applying the chi-square test, he questioned the rule that the expected frequencies should not be small.

CORRECTIONS FOR X^2

Given equal parameters, the mean of the X^2 statistic of Equation (2) is k-1, and the variance is 2(k-1)(1-1/N) [Haldane (1937)]. The values of X^2 are discrete by an interval 2k/N. The mean and variance of the chi-square statistic are k-1 and 2(k-1), respectively, and the distribution is continuous.

Various corrections have been proposed for X^2 to bring its distribution into better agreement with that of chi-square. The simplest correction available is the familiar correction for continuity which, when the parameters are equal, consists of subtracting k/N from the computed value of X^2. The correction of course decreases X^2 and increases its chi-square probability.

Hoel (1938) worked out a correction, based on second-order terms, for the customary first-order approximation by studying the generating and distribution functions of the multinomial and chi-square. The correction results in a slight adjustment of the chi-square probability of X^2.

Nass (1959) developed a modified statistic, X'^2, which, when the parameters are equal, may be written, $X'^2 = [k(\Sigma_i O_i^2 - 1) - N^2]/(N-1)$. The statistic has N(k-1)/(N-1) degrees of freedom and includes correction for continuity. When expectation is 1 in each cell, $X'^2 = k(\Sigma_i O_i^2 - k - 1)/(k-1)$ with k degrees of freedom.

Wise (1963) recommends that the denominator of Equation (2) be taken as $E_i+1/2$ instead of E_i. This, like the standard correction for continuity, decreases the value of X^2 and increases its chi-square probability.

None of the corrections is generally effective; indeed, inspection of the numbers of underestimates and overestimates in Tables 4-8 and 11 suggests that no correction will succeed. There is little if any bias in the chi-square approximation to the multinomial for the values of k and N and the regions considered in this study. Moreover, for no apparent reason, the chi-square probability is frequently very close to the multinomial probability.

SUBSTITUTE TESTS

In addition to corrections, several substitutes have been proposed for the X^2 test. These include the likelihood ratio test [Neyman and Pearson (1931); Cochran (1952)], the Neyman smooth test [Cochran (1952)], and the Kolmogorov-Smirnov test [Birnbaum (1952)]. Most such tests are applicable only when the categories are ordered and are thus less general than the X^2 test. In recent years the Kolmogorov-Smirnov test has been recommended by several writers. It is of interest to compare it briefly with the X^2 test.

The Kolmogorov-Smirnov Test. When the categories are ordered by degree or quantity, the Kolmogorov-Smirnov test is applicable. Both Goodman (1954) and Siegel (1956) recommend the test as superior to the X^2 test.

Goodman's illustrative data may be classified as shown below. The

Category	0	1	2	3	4	5
Observed Frequency	0	1	4	0	4	6
Expected Frequency	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2

maximum absolute difference between cumulative observed and expected frequencies occurs in Category 3; there it is 5/15. According to Birnbaum's Tables (1952), the corresponding probability is .055. The usual calculations yield a X^2 of 12.6 with 5 degrees of freedom. The corresponding chi-square probability is .027. The exact cumulative probability of the outcome 6-4-4-1-0-0 in the multinomial (N=15; k=6; φ_i equal) is .013, the same of course as the outcome 0-1-4-0-4-6. The percentage error in the Kolmogorov-Smirnov test is 323, while the percentage error in the X^2

test is 108. Both tests overestimate the exact probability.

Siegel's hypothetical data fall in five ordered categories with frequencies 0, 1, 0, 5, 4, respectively. The maximum absolute difference between observed and expected frequencies is 5/10, and the corresponding probability is .008. The chi-square probability is .027; the exact probability of the outcome 5-4-1-0-0 in the multinomial (N=10; k=5; φ_i equal) is .022. The Kolmogorov-Smirnov probability underestimates exact P, with percentage error of 64; the chi-square probability overestimates exact P with percentage error of 23.

In a random sampling experiment, Slakter (1965) obtained distributions of 10,000 Kolmogorov-Smirnov and chi-square probabilities for each of 25 combinations of N and k yielding expected frequencies varying from 10/50 to 50/9. He compared the actual alphas in the empirical sampling distributions with tabled alphas at .01, .05, and .10. The Kolmogorov-Smirnov test gave more valid results than the chi-square test in only 12 of the 75 comparisons, in the sense of yielding actual alphas closer to tabled alphas. Slakter's study is of interest here because it indicates that, in the situations considered, the validity of the X^2 test was relatively independent of the expected frequencies. Slakter concluded that the results seem to confirm the studies relating to the robustness of the chi-square approximation with respect to the minimum expectation in each group.

Little is known about the comparative power of the X^2 and Kolmogorov-Smirnov tests when the data are discrete. The latter has generally been assumed to be more sensitive than the former, particularly in small samples to which, it is widely believed, the X^2 test is not applicable unless some classes are combined. Slakter's empirical results and the exact results of the present study suggest that the belief has little foundation.

CONCLUDING REMARKS

The tables in the following pages include significance values (cumulative probabilities) in the .005-.205 region for the multinomial distributions (N=3,4,...,30; k=3), (N=4,5,...,25; k=4), (N=5,6,...,25; k=5), (N=6,7,...,30; k=6), and (N=7,8,...,28; k=7), with parameters equal to 1/k. The nature and use of the tables are discussed on pp. 6-7.

In addition to the 118 distributions for which significance values were tabled, 44 distributions were studied. These included (N=40,50,60,

70,80; k=3), (N=40; k=4), (N=50; k=5), and (N=35; k=7) in which the parameters were equal and 36 distributions, N's varying from 4 to 12, k=3, parameters unequal.

The comparisons of the chi-square probabilities of X^2 with the exact multinomial probabilities in the 162 distributions brought out two surprising results. First, the X^2 approximation did not improve as the number of categories increased; second, the X^2 test performed as least as well when expectations were 1 as when they were 5. This is not to say that the chi-square probabilities were good approximations of the exact probabilities. On the contrary, they tended to be poor approximations.

However, when the probabilities were compared in terms of mutual inclusion in conventional regions of significance, the X^2 test held up reasonably well, in that it led to the same decision as the exact probabilities most of the time.

Insofar as one may generalize from the distributions studied, the X^2 test is not satisfactory if close approximations to exact probabilities are needed and expectations fewer than 10. Even when expectations exceed 10, the approximations may be poor.

Regarding expectations, there appears to be no more justification for the "five-or-more" rule-of-thumb than for a "one-or-more" rule in using X^2 to test the hypothesis that the parameters of a multinomial distribution have specified values against the alternative that at least one parameter is not as specified.

REFERENCES

Aiken, H. H., et al. 1955. Tables of the Cumulative Binomial Probability Distribution. Cambridge: Harvard University Press.

Birnbaum, Z. W. 1952. Numerical tabulation of the distribution of Kolmogorov's statistic for finite sample size. Journal of the American Statistical Association, 47:425-441.

Chapanis, A. 1962. An exact multinomial one-sample test of significance. Psychological Bulletin, 59:306-310.

Cochran, W. G. 1952. The chi-square test of goodness of fit. Annals of Mathematical Statistics, 23:315-345.

El Shanawany, M. R. 1936. An illustration of the accuracy of the chi-square approximation. Biometrika, 28:179-187.

Goodman, L. A. 1954. Kolmogorov-Smirnov tests for psychological research. Psychological Bulletin, 51:160-168.

Gridgemen, N. T. 1964. Exact multinomial significance tests: note on a paper by Alphonse Chapanis. Psychological Bulletin, 61:239-240.

Gurian, J. M., Cornfield, J. and Mosimann, J. E. 1964. Comparisons of power for some exact multinomial significance tests. Psychometrika, 29:409-419.

Haldane, J. B. S. 1937. The exact value of the moments of the distribution of chi-square, used as a test of goodness-of-fit when expectations are small. Biometrika, 29:133-143.

Hoel, P. G. 1938. On the chi-square distribution for small samples. Annals of Mathematical Statistics, 9:158-165.

March, David L. Multin Program. 1968. Bethlehem, Pa.: Lehigh University Computing Center. The program is written for the CDC 6400 computer. The program requires $70{,}000_8$ words of core memory and four logical disc files (or magnetic tapes.)

Nass, C. A. G. 1959. The chi-square test for small expectations in contingency tables, with special reference to accidents and absenteeism. Biometrika, 46:365-385.

Neyman, J. and Pearson, E. S. 1931. Further notes on the chi-square distribution. Biometrika, 22:298-305.

Pearson, K. 1900. On the criterion that a given system of deviations from the probable in the case of a correlated system of variables is such that it can be reasonably supposed to have arisen from random sampling. Philosophical Magazine Series, 50:157-175.

Siegel, S. 1956. Nonparametric Statistics for the Behavioral Sciences, New York: McGraw-Hill Book Company.

Slakter, M. J. 1965. A comparison of the Pearson chi-square and Kolmogorov goodness-of-fit tests with respect to validity. Journal of the American Statistical Association, 60:854-858.

Slakter, M. J. 1966. Comparative validity of the chi-square and two modified chi-square goodness-of-fit tests for small but equal expected frequencies. Biometrika, 53:619-622.

Smith, J. G. and Duncan, A. J. 1945. Sampling Statistics and Applications. New York: McGraw-Hill Book Company.

Tate, M. W. and Clelland, R. C. 1957. Nonparametric and Shortcut Statistics. Danville, Ill.: Interstate Printers and Publishers.

Van Der Waerden, B. L. 1957. Mathematische Statistik. Berlin: Springer-Verlag.

Wise, M. E. 1963. Multinomial probabilities and the chi-square and X^2 distributions. Biometrika, 50:145-154.

Wolfenden, H. H. 1942. Fundamental Principles of Mathematical Statistics. Toronto: The Macmillan Company of Canada. Wolfenden states, p. 175, "The mathematical expression for the distribution of chi-square [for frequency data] was given originally by Pizzetti in 1892 . . . . The chi-square test, however, was first developed for practical use by Karl Pearson in 1900. . . ."

Table 12. Outcomes and corresponding significance levels ($.005 \leq P \leq .205$) in the multinomials, N=3,4,...,30; k=3; $\varphi_i = 1/3$ for each i.

N = 3

3-0-0 (.111)

N = 4

4-0-0 (.037)

N = 5

5-0-0 (.012)
4-1-0 (.136)

N = 6

5-1-0 (.053)
4-2-0 (.177)

N = 7

6-1-0 (.021)
5-2-0 (.078)
4-3-0 (.174)

N = 8

7-1-0 (.008)
6-2-0 (.033)
6-1-1 (.110)
5-3-0 (.110)
4-4-0 (.142)

N = 9

7-2-0 (.014)
7-1-1 (.025)
6-3-0 (.050)
6-2-1 (.166)
5-4-0 (.089)

N = 10

8-2-0 (.006)
8-1-1 (.010)
7-3-0 (.022)
7-2-1 (.093)
6-4-0 (.044)
6-3-1 (.178)
5-5-0 (.057)

N = 11

8-3-0 (.010)
8-2-1 (.053)
7-4-0 (.021)
7-3-1 (.098)
7-2-2 (.132)
6-5-0 (.037)

N = 12

9-2-1 (.017)
8-4-0 (.010)
8-3-1 (.054)
8-2-2 (.070)
7-5-0 (.026)
7-4-1 (.115)
6-6-0 (.031)
6-5-1 (.178)

N = 13

10-2-1 (.008)
9-3-1 (.030)
9-2-2 (.038)
8-5-0 (.012)
8-4-1 (.062)
8-3-2 (.172)
7-6-0 (.019)
7-5-1 (.101)
6-6-1 (.123)

N = 14

10-3-1 (.017)
10-2-2 (.021)
9-5-0 (.006)
9-4-1 (.033)
9-3-2 (.081)
8-6-0 (.010)
8-5-1 (.056)
8-4-2 (.167)
7-7-0 (.012)
7-6-1 (.111)

N = 15

11-3-1 (.007)
11-2-2 (.011)
10-4-1 (.018)
10-3-2 (.043)
9-6-0 (.005)
9-5-1 (.043)
9-4-2 (.104)
9-3-3 (.125)
8-7-0 (.010)
8-6-1 (.062)
8-5-2 (.181)
7-7-1 (.072)

N = 16

11-4-1 (.010)
11-3-2 (.016)
10-5-1 (.022)
10-4-2 (.065)
10-3-3 (.076)
9-7-0 (.006)
9-6-1 (.034)
9-5-2 (.109)
8-8-0 (.007)
8-7-1 (.048)
8-6-2 (.160)

N = 17

12-4-1 (.005)
12-3-2 (.008)
11-5-1 (.012)
11-4-2 (.027)
11-3-3 (.047)
10-6-1 (.018)
10-5-2 (.065)
10-4-3 (.129)
9-7-1 (.036)
9-6-2 (.129)
8-8-1 (.041)
8-7-2 (.169)

N = 18

12-5-1 (.006)
12-4-2 (.014)
12-3-3 (.022)
11-6-1 (.010)
11-5-2 (.039)
11-4-3 (.057)
10-7-1 (.019)
10-6-2 (.076)
10-5-3 (.156)
10-4-4 (.180)
9-8-1 (.029)
9-7-2 (.103)
8-8-2 (.118)

N = 19

13-4-2	(.007)
13-3-3	(.009)
12-6-1	(.005)
12-5-2	(.024)
12-4-3	(.033)
11-7-1	(.012)
11-6-2	(.044)
11-5-3	(.104)
11-4-4	(.118)
10-8-1	(.016)
10-7-2	(.061)
10-6-3	(.158)
9-9-1	(.018)
9-8-2	(.082)

N = 20

13-5-2	(.012)
13-4-3	(.019)
12-7-1	(.006)
12-6-2	(.025)
12-5-3	(.048)
12-4-4	(.070)
11-8-1	(.009)
11-7-2	(.036)
11-6-3	(.102)
11-5-4	(.139)
10-9-1	(.015)
10-8-2	(062)
10-7-3	(.177)
9-9-2	(.078)

N = 21

14-5-2	(.005)
14-4-3	(.012)
13-6-2	(.015)
13-5-3	(.027)
13-4-4	(.032)
12-8-1	(.006)
12-7-2	(.021)
12-6-3	(.066)
12-5-4	(.087)
11-9-1	(.008)
11-8-2	(.041)
11- 7-3	(.111)
10-10-1	(.009)
10- 9-2	(.052)
10- 8-3	(.145)
9- 9-3	(.163)

N = 22

14- 6-2	(.009)
14- 5-3	(.016)
14- 4-4	(.018)
13- 7-2	(.016)
13- 6-3	(.039)
13- 5-4	(.055)
12- 9-1	(.006)
12- 8-2	(.023)
12- 7-3	(.070)
12- 6-4	(.118)
12- 5-5	(.161)
11-10-1	(.007)
11- 9-2	(.031)
11- 8-3	(.092)
10-10-2	(.043)
10- 9-3	(.145)

N = 23

15- 5-3	(.007)
15- 4-4	(.010)
14- 7-2	(.009)
14- 6-3	(.018)
14- 5-4	(.035)
13- 8-2	(.013)
13- 7-3	(.043)
13- 6-4	(.073)
13- 5-5	(.082)
12-10-1	(.005)
12- 9-2	(.022)
12- 8-3	(.058)
12- 7-4	(.140)
12- 6-5	(.180)
11-11-1	(.005)
11-10-2	(.028)
11- 9-3	(.101)
10-10-3	(.111)

N = 24

16- 4-4	(.006)
15- 7-2	(.005)
15- 6-3	(.010)
15- 5-4	(.016)
14- 8-2	(.008)
14- 7-3	(.027)
14- 6-4	(.045)
14- 5-5	(.050)
13- 9-2	(.013)
13- 8-3	(.045)
13- 7-4	(.095)
13- 6-5	(.120)
12-10-2	(.020)
12- 9-3	(.063)
12- 8-4	(.148)
11-11-2	(.022)
11-10-3	(.078)
11- 9-4	(.186)

N = 25

16- 6-3	(.006)
16- 5-4	(.009)
15- 7-3	(.014)
15- 6-4	(.022)
15- 5-5	(.030)
14- 9-2	(.007)
14- 8-3	(.027)
14- 7-4	(.049)
14- 6-5	(.080)
13-10-2	(.012)
13- 9-3	(.038)
13- 8-4	(.098)
13- 7-5	(.153)
13- 6-6	(.202)
12-11-2	(.017)
12-10-3	(.059)
12- 9-4	(.124)
11-11-3	(.065)
11-10-4	(.185)

N = 26

16- 7-3	(.008)
16- 6-4	(.014)
16- 5-5	(.018)
15- 9-2	(.005)
15- 8-3	(.017)
15- 7-4	(.029)
15- 6-5	(.053)
14-10-2	(.008)
14- 9-3	(.023)
14- 8-4	(.064)
14- 7-5	(.100)
14- 6-6	(.110)
13-11-2	(.010)
13-10-3	(.036)
13- 9-4	(.082)
13- 8-5	(.177)
12-12-2	(.011)
12-11-3	(.045)
12-10-4	(.133)
11-11-4	(.146)

N = 27

17- 6-4	(.007)
17- 5-5	(.009)
16- 8-3	(.011)
16- 7-4	(.017)
16- 6-5	(.027)
15-10-2	(.005)
15- 9-3	(.014)
15- 8-4	(.042)
15- 7-5	(.053)
15- 6-6	(.071)
14-11-2	(.006)
14-10-3	(.022)
14- 9-4	(.064)
14- 8-5	(.126)
14- 7-6	(.153)
13-12-2	(009)
13-11-3	(.032)
13-10-4	(.087)
13- 9-5	(.184)
12-12-3	(.036)
12-11-4	(.105)

N = 28

17- 8-3	(.005)
17- 7-4	(.010)

17- 6-5	(.013)	12-12-4	(.089)	15- 8-6	(.128)	17- 9-4	(.018)
16- 9-3	(.009)			15- 7-7	(.139)	17- 8-5	(.027)
16- 8-4	(.024)			14-12-3	(.017)	17- 7-6	(.033)
16- 7-5	(.034)	N = 29		14-11-4	(.052)	16-11-3	(.008)
16- 6-6	(.045)			14-10-5	(.128)	16-10-4	(.023)
15-10-3	(.016)	18- 7-4	(.006)	13-13-3	(.019)	16- 9-5	(.060)
15- 9-4	(.041)	18- 6-5	(.008)	13-12-4	(.073)	16- 8-6	(.072)
15- 8-5	(.068)	17- 9-3	(.006)	13-11-5	(.165)	16- 7-7	(.093)
15- 7-6	(.106)	17- 8-4	(.012)	12-12-5	(.179)	15-12-3	(.012)
14-12-2	(.006)	17- 7-5	(.022)			15-11-4	(.039)
14-11-3	(.020)	17- 6-6	(.025)			15-10-5	(.086)
14-10-4	(.056)	16-10-3	(.009)	N = 30		15- 9-6	(.156)
14- 9-5	(.127)	16- 9-4	(.029)			15- 8-7	(.185)
14- 8-6	(.188)	16- 8-5	(.043)	19- 6-5	(.005)	14-13-3	(.016)
13-13-2	(.007)	16- 7-6	(.063)	18- 8-4	(.007)	14-12-4	(.047)
13-12-3	(.028)	15-11-3	(.014)	18- 7-5	(.010)	14-11-5	(.112)
13-11-4	(.082)	15-10-4	(.036)	18- 6-6	(.014)	13-13-4	(.051)
13-10-5	(.156)	15- 9-5	(.087)	17-10-3	(.006)	13-12-5	(.133)

Table 13. Outcomes and corresponding significance levels ($.005 \leq P \leq .205$) in the multinomials, N=4,5,...,25; k=4; $\varphi_i = 1/4$ for each i.

N = 4		5-4-0-0	(.015)	7-2-2-1	(.110)	7-5-1-1	(.051)
		5-3-1-0	(.092)	6-5-1-0	(.021)	7-4-3-0	(.044)
4-0-0-0	(.016)	5-2-2-0	(.155)	6-4-2-0	(.057)	7-4-2-1	(.143)
3-1-0-0	(.203)	4-4-1-0	(.121)	6-4-1-1	(.170)	7-3-3-1	(.164)
				6-3-3-0	(.093)	6-6-2-0	(.030)
				5-5-2-0	(.080)	6-6-1-1	(.070)
N = 5		N = 10		5-4-3-0	(.170)	6-5-3-0	(.070)
				5-5-1-1	(.182)	6-4-4-0	(.095)
4-1-0-0	(.063)	7-2-1-0	(.015)	4-4-4-0	(.190)	5-5-4-0	(.106)
3-2-0-0	(.180)	7-1-1-1	(.018)				
		6-4-0-0	(.005)				
		6-3-1-0	(.037)	N = 13		N = 15	
N = 6		6-2-2-0	(.080)				
		6-2-1-1	(.167)	9-2-1-1	(.007)	10-3-1-1	(.005)
5-1-0-0	(.019)	5-5-0-0	(.007)	8-4-1-0	(.005)	10-2-2-1	(.007)
4-2-0-0	(.063)	5-4-1-0	(.080)	8-3-2-0	(.017)	9-4-2-0	(.006)
4-1-1-0	(.180)	5-3-2-0	(.167)	8-3-1-1	(.031)	9-4-1-1	(.013)
3-3-0-0	(.092)	4-4-2-0	(.203)	8-2-2-1	(.057)	9-3-3-0	(.008)
				7-5-1-0	(.010)	9-3-2-1	(.032)
				7-4-2-0	(.031)	9-2-2-2	(.055)
N = 7		N = 11		7-4-1-1	(.066)	8-5-2-0	(.011)
				7-3-3-0	(.037)	8-5-1-1	(.025)
6-1-0-0	(.005)	8-2-1-0	(.006)	7-3-2-1	(.166)	8-4-3-0	(.022)
5-2-0-0	(.021)	8-1-1-1	(.007)	7-2-2-2	(.176)	8-4-2-1	(.085)
5-1-1-0	(.077)	7-3-1-0	(.015)	6-6-1-0	(.013)	8-3-3-1	(.097)
4-3-0-0	(.046)	7-2-2-0	(.020)	6-5-2-0	(.050)	8-3-2-2	(.151)
		7-2-1-1	(.053)	6-5-1-1	(.113)	7-6-2-0	(.017)
		6-4-1-0	(.033)	6-4-3-0	(.088)	7-6-1-1	(.044)
N = 8		6-3-2-0	(.079)	5-5-3-0	(.113)	7-5-3-0	(.044)
		6-3-1-1	(.172)	5-4-4-0	(.130)	7-5-2-1	(.122)
6-2-0-0	(.007)	5-5-1-0	(.041)			7-4-4-0	(.055)
6-1-1-0	(.027)	5-4-2-0	(.119)			7-4-3-1	(.191)
5-3-0-0	(.027)	5-3-3-0	(.172)	N = 14		6-6-3-0	(.049)
5-2-1-0	(.095)	4-4-3-0	(.205)			6-6-2-1	(.136)
4-4-0-0	(.034)			9-3-2-0	(.006)	6-5-4-0	(.069)
4-3-1-0	(.198)			9-3-1-1	(.010)	5-5-5-0	(.087)
		N = 12		9-2-2-1	(.019)		
				8-4-2-0	(.014)		
N = 9		8-3-1-0	(.006)	8-4-1-1	(.034)	N = 16	
		8-2-2-0	(.008)	8-3-3-0	(.019)		
7-1-1-0	(.005)	8-2-1-1	(.026)	8-3-2-1	(.086)	10-4-1-1	(.006)
6-3-0-0	(.009)	7-4-1-0	(.013)	8-2-2-2	(.110)	10-3-2-1	(.015)
6-2-1-0	(.038)	7-3-2-0	(.037)	7-6-1-0	(.008)	10-2-2-2	(.022)
6-1-1-1	(.092)	7-3-1-1	(.068)	7-5-2-0	(.026)	9-5-2-0	(.006)

9-5-1-1	(.015)	7-5-5-0	(.044)	10-5-3-1	(.036)	9-7-4-0	(.009)
9-4-3-0	(.010)	7-5-4-1	(.202)	10-5-2-2	(.042)	9-7-3-1	(.038)
9-4-2-1	(.038)	6-6-5-0	(.048)	10-4-4-1	(.039)	9-7-2-2	(.053)
9-3-3-1	(.050)			10-4-3-2	(.083)	9-6-5-0	(.014)
9-3-2-2	(.079)			10-3-3-3	(.091)	9-6-4-1	(.063)
8-6-2-0	(.008)	N = 18		9-8-1-1	(.005)	9-6-3-2	(.136)
8-6-1-1	(.022)			9-7-3-0	(.006)	9-5-5-1	(.079)
8-5-3-0	(.022)	11-4-2-1	(.007)	9-7-2-1	(.022)	9-5-4-2	(.202)
8-5-2-1	(.072)	11-3-3-1	(.010)	9-6-4-0	(.010)	8-8-4-0	(.010)
8-4-4-0	(.025)	11-3-2-2	(.015)	9-6-3-1	(.048)	8-8-3-1	(.048)
8-4-3-1	(.115)	10-6-1-1	(.005)	9-6-2-2	(.083)	8-8-2-2	(.055)
8-4-2-2	(.131)	10-5-2-1	(.017)	9-5-5-0	(.015)	8-7-5-0	(.020)
7-7-2-0	(.011)	10-4-4-0	(.005)	9-5-4-1	(.083)	8-7-4-1	(.089)
7-7-1-1	(.023)	10-4-3-1	(.033)	9-5-3-2	(.145)	8-7-3-2	(.177)
7-6-3-0	(.031)	10-4-2-2	(.048)	9-4-4-2	(.182)	8-6-6-0	(.022)
7-6-2-1	(.095)	10-3-3-2	(.061)	8-8-3-0	(.008)	8-6-5-1	(.111)
7-5-4-0	(.046)	9-7-1-1	(.007)	8-8-2-1	(.026)	7-7-6-0	(.025)
7-5-3-1	(.163)	9-6-3-0	(.009)	8-7-4-0	(.017)	7-7-5-1	(.145)
6-6-4-0	(.055)	9-6-2-1	(.033)	8-7-3-1	(.057)	7-6-6-1	(.155)
6-6-3-1	(.182)	9-5-4-0	(.014)	8-7-2-2	(.089)		
6-5-5-0	(.060)	9-5-3-1	(.061)	8-6-5-0	(.025)		
		9-5-2-2	(.085)	8-6-4-1	(.107)	N = 21	
N = 17		9-4-4-1	(.066)	8-5-5-1	(.125)		
		9-4-3-2	(.143)	7-7-5-0	(.028)	12-5-3-1	(.007)
11-3-2-1	(.005)	9-3-3-3	(.179)	7-7-4-1	(.115)	12-5-2-2	(.011)
11-2-2-2	(.007)	8-8-1-1	(.007)	7-6-6-0	(.036)	12-4-4-1	(.009)
10-5-1-1	(.006)	8-7-3-0	(.012)	7-6-5-1	(.169)	12-4-3-2	(.019)
10-4-2-1	(.018)	8-7-2-1	(.044)	6-6-6-1	(.187)	12-3-3-3	(.026)
10-3-3-1	(.022)	8-6-4-0	(.021)			11-7-2-1	(.005)
10-3-2-2	(.040)	8-6-3-1	(.085)			11-6-3-1	(.015)
9-6-1-1	(.010)	8-6-2-2	(.121)	N = 20		11-6-2-2	(.023)
9-5-3-0	(.010)	8-5-5-0	(.024)			11-5-4-1	(.023)
9-5-2-1	(.040)	8-5-4-1	(.121)	12-4-3-1	(.005)	11-5-3-2	(.043)
9-4-4-0	(.011)	7-7-4-0	(.022)	12-4-2-2	(.008)	11-4-4-2	(.048)
9-4-3-1	(.066)	7-7-3-1	(.093)	12-3-3-2	(.012)	11-4-3-3	(.062)
9-4-2-2	(.078)	7-7-2-2	(.148)	11-6-2-1	(.007)	10-8-2-1	(.009)
9-3-3-2	(.105)	7-6-5-0	(.038)	11-5-3-1	(.017)	10-7-4-0	(.005)
8-7-2-0	(.007)	7-6-4-1	(.174)	11-5-2-2	(.023)	10-7-3-1	(.025)
8-7-1-1	(.013)	7-5-5-1	(.194)	11-4-4-1	(.021)	10-7-2-2	(.031)
8-6-3-0	(.018)	6-6-6-0	(.045)	11-4-3-2	(.033)	10-6-5-0	(.008)
8-6-2-1	(.056)			11-3-3-3	(.049)	10-6-4-1	(.035)
8-5-4-0	(.026)	N = 19		10-7-2-1	(.011)	10-6-3-2	(.080)
8-5-3-1	(.095)			10-6-4-0	(.006)	10-5-5-1	(.045)
8-5-2-2	(.151)	12-3-2-2	(.005)	10-6-3-1	(.028)	10-5-4-2	(.124)
8-4-4-1	(.115)	11-5-2-1	(.009)	10-6-2-2	(.045)	10-5-3-3	(.148)
7-7-3-0	(.020)	11-4-3-1	(.012)	10-5-5-0	(.007)	10-4-4-3	(.181)
7-7-2-1	(.071)	11-4-2-2	(.019)	10-5-4-1	(.045)	9-9-2-1	(.010)
7-6-4-0	(.040)	11-3-3-2	(.030)	10-5-3-2	(.079)	9-8-4-0	(.006)
7-6-3-1	(.138)	10-6-2-1	(.015)	10-4-4-2	(.096)	9-8-3-1	(.029)
7-6-2-2	(.202)	10-5-4-0	(.007)	10-4-3-3	(.136)	9-8-2-2	(.038)
				9-8-2-1	(.016)	9-7-5-0	(.012)

9-7-4-1	(.055)	9-8-4-1	(.037)	9-9-5-0	(.006)	10- 9-3-2	(.039)
9-7-3-2	(.104)	9-8-3-2	(.084)	9-9-4-1	(.028)	10- 8-6-0	(.006)
9-6-6-0	(.013)	9-7-6-0	(.012)	9-9-3-2	(.058)	10- 8-5-1	(.031)
9-6-5-1	(.080)	9-7-5-1	(.067)	9-8-6-0	(.008)	10- 8-4-2	(.082)
9-6-4-2	(.181)	9-7-4-2	(.152)	9-8-5-1	(.053)	10- 8-3-3	(.100)
9-5-5-2	(.195)	9-7-3-3	(.173)	9-8-4-2	(.110)	10- 7-7-0	(.007)
8-8-5-0	(.013)	9-6-6-1	(.075)	9-8-3-3	(.155)	10- 7-6-1	(.045)
8-8-4-1	(.058)	8-8-6-0	(.014)	9-7-7-0	(.010)	10- 7-5-2	(.115)
8-8-3-2	(.131)	8-8-5-1	(.071)	9-7-6-1	(.071)	10- 6-6-2	(.134)
8-7-6-0	(.017)	8-8-4-2	(.162)	9-7-5-2	(.175)	9- 9-6-0	(.006)
8-7-5-1	(.091)	8-7-7-0	(.015)	8-8-7-0	(.012)	9- 9-5-1	(.039)
8-6-6-1	(.124)	8-7-6-1	(.099)	8-8-6-1	(.075)	9- 9-4-2	(.095)
7-7-7-0	(.019)	7-7-7-1	(.107)	8-8-5-2	(.186)	9- 9-3-3	(.103)
7-7-6-1	(.139)			8-7-7-1	(.088)	9- 8-7-0	(.009)
						9- 8-6-1	(.052)
		N = 23				9- 8-5-2	(.150)
N = 22				N = 24		9- 7-7-1	(.061)
		13-6-2-2	(.005)			8- 8-8-0	(.009)
13-5-2-2	(.005)	13-5-4-1	(.005)	14- 4-4-2	(.006)	8- 8-7-1	(.070)
13-4-3-2	(.008)	13-5-3-2	(.011)	14- 4-3-3	(.009)		
13-3-3-3	(.011)	13-4-4-2	(.014)	13- 6-4-1	(.005)		
12-6-3-1	(.007)	13-4-3-3	(.016)	13- 6-3-2	(.012)	N = 25	
12-6-2-2	(.011)	12-7-3-1	(.006)	13- 5-5-1	(.007)		
12-5-4-1	(.011)	12-7-2-2	(.009)	13- 5-4-2	(.016)	14- 6-3-2	(.006)
12-5-3-2	(.023)	12-6-4-1	(.012)	13- 5-3-3	(.021)	14- 5-4-2	(.008)
12-4-4-2	(.027)	12-6-3-2	(.021)	13- 4-4-3	(.024)	14- 5-3-3	(.010)
12-4-3-3	(.033)	12-5-5-1	(.015)	12- 8-3-1	(.005)	14- 4-4-3	(.012)
11-8-2-1	(.005)	12-5-4-2	(.031)	12- 8-2-2	(.008)	13- 7-4-1	(.006)
11-7-3-1	(.013)	12-5-3-3	(.041)	12- 7-4-1	(.011)	13- 7-3-2	(.010)
11-7-2-2	(.018)	12-4-4-3	(.056)	12- 7-3-2	(.020)	13- 6-5-1	(.008)
11-6-4-1	(.023)	11-8-3-1	(.009)	12- 6-5-1	(.013)	13- 6-4-2	(.017)
11-6-3-2	(.042)	11-8-2-2	(.015)	12- 6-4-2	(.034)	13- 6-3-3	(.023)
11-5-5-1	(.026)	11-7-4-1	(.019)	12- 6-3-3	(.047)	13- 5-5-2	(.020)
11-5-4-2	(.053)	11-7-3-2	(.034)	12- 5-5-2	(.041)	13- 5-4-3	(.034)
11-5-3-3	(.089)	11-6-5-1	(.026)	12- 5-4-3	(.067)	13- 4-4-4	(.043)
11-4-4-3	(.105)	11-6-4-2	(.065)	12- 4-4-4	(.091)	12- 9-2-2	(.006)
10-9-2-1	(.006)	11-6-3-3	(.083)	11- 9-3-1	(.008)	12- 8-4-1	(.009)
10-8-3-1	(.017)	11-5-5-2	(.079)	11- 9-2-2	(.011)	12- 8-3-2	(.016)
10-8-2-2	(.024)	11-5-4-3	(.123)	11- 8-4-1	(.015)	12- 7-5-1	(.014)
10-7-5-0	(.006)	11-4-4-4	(.146)	11- 8-3-2	(.028)	12- 7-4-2	(.031)
10-7-4-1	(.031)	10-9-3-1	(.014)	11- 7-5-1	(.023)	12- 7-3-3	(.043)
10-7-3-2	(.067)	10-9-2-2	(.017)	11- 7-4-2	(.058)	12- 6-6-1	(.014)
10-6-6-0	(.007)	10-8-5-0	(.006)	11- 7-3-3	(.074)	12- 6-5-2	(.047)
10-6-5-1	(.047)	10-8-4-1	(.024)	11- 6-6-1	(.025)	12- 6-4-3	(.072)
10-6-4-2	(.119)	10-8-3-2	(.053)	11- 6-5-2	(.089)	12- 5-5-3	(.090)
10-6-3-3	(.134)	10-7-6-0	(.007)	11- 6-4-3	(.127)	12- 5-4-4	(.104)
10-5-5-2	(.126)	10-7-5-1	(.038)	11- 5-5-3	(.157)	11-10-3-1	(.005)
9-9-4-0	(.005)	10-7-4-2	(.098)	11- 5-4-4	(.167)	11-10-2-2	(.007)
9-9-3-1	(.019)	10-7-3-3	(.130)	10-10-3-1	(.008)	11- 9-4-1	(.011)
9-9-2-2	(.028)	10-6-6-1	(.043)	10-10-2-2	(.012)	11- 9-3-2	(.022)
9-8-5-0	(.009)	10-6-5-2	(.144)	10- 9-4-1	(.018)	11- 8-5-1	(.019)

11- 8-4-2	(.052)	10-10-4-1	(.012)	10- 8-5-2	(.099)	9- 9-4-3	(.190)
11- 8-3-3	(.065)	10-10-3-2	(.026)	10- 8-4-3	(.165)	9- 8-8-0	(.007)
11- 7-6-1	(.028)	10- 9-5-1	(.026)	10- 7-7-1	(.041)	9- 8-7-1	(.056)
11- 7-5-2	(.079)	10- 9-4-2	(.062)	10- 7-6-2	(.134)	9- 8-6-2	(.165)
11- 7-4-3	(.121)	10- 9-3-3	(.082)	9- 9-7-0	(.007)	9- 7-7-2	(.199)
11- 6-6-2	(.090)	10- 8-7-0	(.006)	9- 9-6-1	(.039)	8- 8-8-1	(.057)
11- 6-5-3	(.181)	10- 8-6-1	(.037)	9- 9-5-2	(.110)		

Table 14. Outcomes and corresponding significance levels ($.005 \leq P \leq .205$) in the multinomials, N=5,6,...,25; k=5; $\varphi_i = 1/5$ for each i.

N = 5	4-3-2-0-0 (.092)	7-2-2-1-0 (.025)
	3-3-3-0-0 (.147)	7-2-1-1-1 (.048)
4-1-0-0-0 (.034)		6-4-2-0-0 (.011)
3-2-0-0-0 (.098)		6-4-1-1-0 (.038)
	N = 10	6-3-3-0-0 (.019)
		6-3-2-1-0 (.075)
N = 6	7-1-1-1-0 (.005)	6-3-1-1-1 (.159)
	6-3-1-0-0 (.010)	6-2-2-2-0 (.123)
5-1-0-0-0 (.008)	6-2-2-0-0 (.022)	5-5-2-0-0 (.017)
4-2-0-0-0 (.027)	6-2-1-1-0 (.053)	5-5-1-1-0 (.042)
4-1-1-0-0 (.098)	6-1-1-1-1 (.109)	5-4-3-0-0 (.038)
3-3-0-0-0 (.040)	5-4-1-0-0 (.022)	5-4-2-1-0 (.123)
	5-3-2-0-0 (.053)	5-3-3-1-0 (.159)
	5-3-1-1-0 (.109)	4-4-4-0-0 (.044)
N = 7	5-2-2-1-0 (.175)	4-4-3-1-0 (.193)
	4-4-2-0-0 (.062)	
5-2-0-0-0 (.007)	4-4-1-1-0 (.128)	
5-1-1-0-0 (.032)	4-3-3-0-0 (.075)	N = 13
4-3-0-0-0 (.016)		
4-2-1-0-0 (.113)		8-2-2-1-0 (.010)
3-3-1-0-0 (.167)	N = 11	8-2-1-1-1 (.022)
		7-4-2-0-0 (.005)
N = 8	7-2-1-1-0 (.014)	7-4-1-1-0 (.012)
	7-1-1-1-1 (.029)	7-3-3-0-0 (.006)
6-1-1-0-0 (.009)	6-4-1-0-0 (.007)	7-3-2-1-0 (.034)
5-3-0-0-0 (.009)	6-3-2-0-0 (.019)	7-3-1-1-1 (.058)
5-2-1-0-0 (.037)	6-3-1-1-0 (.046)	7-2-2-2-0 (.037)
5-1-1-1-0 (.097)	6-2-2-1-0 (.087)	7-2-2-1-1 (.088)
4-4-0-0-0 (.011)	6-2-1-1-1 (.166)	6-5-2-0-0 (.008)
4-3-1-0-0 (.080)	5-5-1-0-0 (.009)	6-5-1-1-0 (.020)
4-2-2-0-0 (.129)	5-4-2-0-0 (.028)	6-4-3-0-0 (.015)
3-3-2-0-0 (.172)	5-4-1-1-0 (.087)	6-4-2-1-0 (.054)
	5-3-3-0-0 (.046)	6-4-1-1-1 (.147)
N = 9	5-3-2-1-0 (.166)	6-3-3-1-0 (.080)
	4-4-3-0-0 (.053)	6-3-2-2-0 (.147)
6-2-1-0-0 (.011)		5-5-3-0-0 (.020)
6-1-1-1-0 (.032)		5-5-2-1-0 (.068)
5-3-1-0-0 (.032)	N = 12	5-5-1-1-1 (.150)
5-2-2-0-0 (.053)		5-4-4-0-0 (.024)
5-2-1-1-0 (.139)	8-2-1-1-0 (.005)	5-4-3-1-0 (.147)
4-4-1-0-0 (.042)	8-1-1-1-1 (.007)	5-4-2-2-0 (.184)
	7-3-2-0-0 (.007)	4-4-4-1-0 (.158)
	7-3-1-1-0 (.015)	

N = 14

9-2-1-1-1	(.006)
8-4-1-1-0	(.005)
8-3-2-1-0	(.014)
8-3-1-1-1	(.025)
8-2-2-2-0	(.017)
8-2-2-1-1	(.042)
7-5-1-1-0	(.008)
7-4-3-0-0	(.006)
7-4-2-1-0	(.025)
7-4-1-1-1	(.052)
7-3-3-1-0	(.030)
7-3-2-2-0	(.052)
7-3-2-1-1	(.121)
7-2-2-2-1	(.152)
6-6-1-1-0	(.010)
6-5-3-0-0	(.010)
6-5-2-1-0	(.040)
6-5-1-1-1	(.082)
6-4-4-0-0	(.015)
6-4-3-1-0	(.068)
6-4-2-2-0	(.106)
6-3-3-2-0	(.145)
5-5-4-0-0	(.016)
5-5-3-1-0	(.082)
5-5-2-2-0	(.128)
5-4-4-1-0	(.106)

N = 15

9-3-1-1-1	(.007)
9-2-2-2-0	(.007)
9-2-2-1-1	(.014)
8-4-2-1-0	(.011)
8-4-1-1-1	(.024)
8-3-3-1-0	(.014)
8-3-2-2-0	(.024)
8-3-2-1-1	(.054)
8-2-2-2-1	(.085)
7-6-1-1-0	(.006)
7-5-3-0-0	(.006)
7-5-2-1-0	(.018)
7-5-1-1-1	(.033)
7-4-4-0-0	(.007)
7-4-3-1-0	(.031)
7-4-2-2-0	(.054)
7-4-2-1-1	(.095)
7-3-3-2-0	(.067)
7-3-3-1-1	(.127)
7-3-2-2-1	(.202)
6-6-3-0-0	(.006)
6-6-2-1-0	(.021)
6-6-1-1-1	(.043)
6-5-4-0-0	(.008)
6-5-3-1-0	(.043)
6-5-2-2-0	(.082)
6-5-2-1-1	(.157)
6-4-4-1-0	(.060)
6-4-3-2-0	(.120)
6-3-3-3-0	(.163)
5-5-5-0-0	(.011)
5-5-4-1-0	(.082)
5-4-4-2-0	(.181)
5-5-3-2-0	(.157)

N = 16

10-2-2-1-1	(.005)
9-4-1-1-1	(.009)
9-3-3-1-0	(.005)
9-3-2-2-0	(.009)
9-3-2-1-1	(.017)
9-2-2-2-1	(.033)
8-5-2-1-0	(.008)
8-5-1-1-1	(.015)
8-4-3-1-0	(.014)
8-4-2-2-0	(.019)
8-4-2-1-1	(.051)
8-3-3-2-0	(.033)
8-3-3-1-1	(.067)
8-3-2-2-1	(.104)
8-2-2-2-2	(.139)
7-6-2-1-0	(.011)
7-6-1-1-1	(.024)
7-5-3-1-0	(.023)
7-5-2-2-0	(.037)
7-5-2-1-1	(.073)
7-4-4-1-0	(.033)
7-4-3-2-0	(.067)
7-4-3-1-1	(.126)
7-4-2-2-1	(.193)
7-3-3-3-0	(.076)
6-6-4-0-0	(.006)
6-6-3-1-0	(.027)
6-6-2-2-0	(.047)
6-6-2-1-1	(.096)
6-5-5-0-0	(.006)
6-5-4-1-0	(.047)
6-5-3-2-0	(.096)
6-5-3-1-1	(.176)
6-4-4-2-0	(.114)
6-4-3-3-0	(.152)
5-5-5-1-0	(.052)
5-5-4-2-0	(.137)
5-5-3-3-0	(.176)

N = 17

10-3-2-1-1	(.007)
10-2-2-2-1	(.011)
9-5-1-1-1	(.007)
9-4-3-1-0	(.006)
9-4-2-2-0	(.008)
9-4-2-1-1	(.019)
9-3-3-2-0	(.012)
9-3-3-1-1	(.026)
9-3-2-2-1	(.043)
9-2-2-2-2	(.069)
8-6-2-1-0	(.005)
8-6-1-1-1	(.011)
8-5-3-1-0	(.011)
8-5-2-2-0	(.017)
8-5-2-1-1	(.038)
8-4-4-1-0	(.013)
8-4-3-2-0	(.033)
8-4-3-1-1	(.069)
8-4-2-2-1	(.096)
8-3-3-3-0	(.043)
8-3-3-2-1	(.134)
8-3-2-2-2	(.196)
7-7-2-1-0	(.007)
7-7-1-1-1	(.012)
7-6-3-1-0	(.016)
7-6-2-2-0	(.025)
7-6-2-1-1	(.054)
7-5-4-1-0	(.025)
7-5-3-2-0	(.054)
7-5-3-1-1	(.104)
7-5-2-2-1	(.157)
7-4-4-2-0	(.069)
7-4-4-1-1	(.134)
7-4-3-3-0	(.075)
6-6-4-1-0	(.028)
6-6-3-2-0	(.059)
6-6-3-1-1	(.120)
6-6-2-2-1	(.177)
6-5-5-1-0	(.035)
6-5-4-2-0	(.089)
6-5-4-1-1	(.191)

6-5-3-3-0 (.120)
6-4-4-3-0 (.145)
5-5-5-2-0 (.106)
5-5-5-1-1 (.198)
5-5-4-3-0 (.177)
5-4-4-4-0 (.204)

N = 18

10-4-2-1-1 (.008)
10-3-3-1-1 (.009)
10-3-2-2-1 (.019)
10-2-2-2-2 (.027)
9-6-1-1-1 (.005)
9-5-3-1-0 (.005)
9-5-2-2-0 (.008)
9-5-2-1-1 (.019)
9-4-4-1-0 (.006)
9-4-3-2-0 (.014)
9-4-3-1-1 (.029)
9-4-2-2-1 (.043)
9-3-3-3-0 (.019)
9-3-3-2-1 (.057)
9-3-2-2-2 (.093)
8-7-1-1-1 (.006)
8-6-3-1-0 (.008)
8-6-2-2-0 (.012)
8-6-2-1-1 (.027)
8-5-4-1-0 (.012)
8-5-3-2-0 (.027)
8-5-3-1-1 (.053)
8-5-2-2-1 (.083)
8-4-4-2-0 (.033)
8-4-4-1-1 (.063)
8-4-3-3-0 (.043)
8-4-3-2-1 (.145)
8-4-2-2-2 (.170)
8-3-3-3-1 (.160)
7-7-3-1-0 (.009)
7-7-2-2-0 (.014)
7-7-2-1-1 (.030)
7-6-4-1-0 (.019)
7-6-3-2-0 (.037)
7-6-3-1-1 (.073)
7-6-2-2-1 (.107)
7-5-5-1-0 (.021)
7-5-4-2-0 (.053)
7-5-4-1-1 (.107)
7-5-3-3-0 (.073)
7-5-3-2-1 (.198)
7-4-4-3-0 (.093)
6-6-5-1-0 (.022)
6-6-4-2-0 (.061)
6-6-4-1-1 (.127)
6-6-3-3-0 (.085)
6-5-5-2-0 (.078)
6-5-5-1-1 (.153)
6-5-4-3-0 (.127)
6-4-4-4-0 (.156)
5-5-5-3-0 (.153)
5-5-4-4-0 (.166)

N = 19

11-3-2-2-1 (.006)
11-2-2-2-2 (.009)
10-5-2-1-1 (.007)
10-4-3-2-0 (.006)
10-4-3-1-1 (.013)
10-4-2-2-1 (.020)
10-3-3-3-0 (.007)
10-3-3-2-1 (.025)
10-3-2-2-2 (.041)
9-6-2-2-0 (.006)
9-6-2-1-1 (.013)
9-5-4-1-0 (.006)
9-5-3-2-0 (.013)
9-5-3-1-1 (.025)
9-5-2-2-1 (.041)
9-4-4-2-0 (.015)
9-4-4-1-1 (.030)
9-4-3-3-0 (.021)
9-4-3-2-1 (.068)
9-4-2-2-2 (.096)
9-3-3-3-1 (.085)
9-3-3-2-2 (.122)
8-7-2-2-0 (.007)
8-7-2-1-1 (.016)
8-6-4-1-0 (.009)
8-6-3-2-0 (.020)
8-6-3-1-1 (.041)
8-6-2-2-1 (.061)
8-5-5-1-0 (.010)
8-5-4-2-0 (.029)
8-5-4-1-1 (.061)
8-5-3-3-0 (.041)
8-5-3-2-1 (.118)
8-5-2-2-2 (.162)
8-4-4-3-0 (.048)
8-4-4-2-1 (.138)
8-4-3-3-1 (.173)
7-7-4-1-0 (.009)
7-7-3-2-0 (.023)
7-7-3-1-1 (.043)
7-7-2-2-1 (.070)
7-6-5-1-0 (.015)
7-6-4-2-0 (.041)
7-6-4-1-1 (.083)
7-6-3-3-0 (.051)
7-6-3-2-1 (.156)
7-6-2-2-2 (.204)
7-5-5-2-0 (.045)
7-5-5-1-1 (.092)
7-5-4-3-0 (.083)
7-5-4-2-1 (.204)
7-4-4-4-0 (.096)
6-6-6-1-0 (.017)
6-6-5-2-0 (.054)
6-6-5-1-1 (.105)
6-6-4-3-0 (.090)
6-5-5-3-0 (.105)
6-5-4-4-0 (.130)
5-5-5-4-0 (.159)

N = 20

11-4-2-2-1 (.007)
11-3-3-2-1 (.011)
11-3-2-2-2 (.015)
10-6-2-1-1 (.005)
10-5-3-2-0 (.005)
10-5-3-1-1 (.012)
10-5-2-2-1 (.016)
10-4-4-2-0 (.006)
10-4-4-1-1 (.015)
10-4-3-3-0 (.010)
10-4-3-2-1 (.033)
10-4-2-2-2 (.048)
10-3-3-3-1 (.040)
10-3-3-2-2 (.064)
9-7-2-1-1 (.007)
9-6-3-2-0 (.010)
9-6-3-1-1 (.018)
9-6-2-2-1 (.033)
9-5-4-2-0 (.015)
9-5-4-1-1 (.033)
9-5-3-3-0 (.018)
9-5-3-2-1 (.064)
9-5-2-2-2 (.094)
9-4-4-3-0 (.021)

9-4-4-2-1	(.075)	11-4-4-1-1	(.006)	8-6-3-3-1	(.132)
9-4-3-3-1	(.099)	11-4-3-2-1	(.012)	8-6-3-2-2	(.184)
9-4-3-2-2	(.136)	11-4-2-2-2	(.017)	8-5-5-3-0	(.042)
9-3-3-3-2	(.167)	11-3-3-3-1	(.017)	8-5-5-2-1	(.119)
8-8-2-1-1	(.008)	11-3-3-2-2	(.026)	8-5-4-4-0	(.052)
8-7-4-1-0	(.006)	10-6-3-1-1	(.009)	8-5-4-3-1	(.184)
8-7-3-2-0	(.013)	10-6-2-2-1	(.014)	8-4-4-4-1	(.204)
8-7-3-1-1	(.024)	10-5-4-2-0	(.007)	7-7-6-1-0	(.008)
8-7-2-2-1	(.039)	10-5-4-1-1	(.014)	7-7-5-2-0	(.025)
8-6-5-1-0	(.008)	10-5-3-3-0	(.009)	7-7-5-1-1	(.050)
8-6-4-2-0	(.020)	10-5-3-2-1	(.030)	7-7-4-3-0	(.038)
8-6-4-1-1	(.048)	10-5-2-2-2	(.042)	7-7-4-2-1	(.114)
8-6-3-3-0	(.033)	10-4-4-3-0	(.010)	7-7-3-3-1	(.135)
8-6-3-2-1	(.094)	10-4-4-2-1	(.036)	7-7-3-2-2	(.200)
8-6-2-2-2	(.128)	10-4-3-3-1	(.049)	7-6-6-2-0	(.030)
8-5-5-2-0	(.025)	10-4-3-2-2	(.078)	7-6-6-1-1	(.058)
8-5-5-1-1	(.050)	10-3-3-3-2	(.088)	7-6-5-3-0	(.058)
8-5-4-3-0	(.048)	9-8-2-1-1	(.005)	7-6-5-2-1	(.150)
8-5-4-2-1	(.128)	9-7-3-2-0	(.006)	7-6-4-4-0	(.078)
8-5-3-3-1	(.164)	9-7-3-1-1	(.012)	7-5-5-4-0	(.081)
8-4-4-4-0	(.051)	9-7-2-2-1	(.019)	6-6-6-3-0	(.064)
8-4-4-3-1	(.189)	9-6-4-2-0	(.010)	6-6-6-2-1	(.157)
7-7-5-1-0	(.010)	9-6-4-1-1	(.024)	6-6-5-4-0	(.092)
7-7-4-2-0	(.024)	9-6-3-3-0	(.016)	6-5-5-5-0	(.108)
7-7-4-1-1	(.049)	9-6-3-2-1	(.049)		
7-7-3-3-0	(.033)	9-6-2-2-2	(.078)		
7-7-3-2-1	(.104)	9-5-5-2-0	(.014)	N = 22	
7-7-2-2-2	(.137)	9-5-5-1-1	(.030)		
7-6-6-1-0	(.012)	9-5-4-3-0	(.024)	12-4-3-2-1	(.005)
7-6-5-2-0	(.037)	9-5-4-2-1	(.078)	12-4-2-2-2	(.007)
7-6-5-1-1	(.071)	9-5-3-3-1	(.088)	12-3-3-3-1	(.007)
7-6-4-3-0	(.064)	9-5-3-2-2	(.132)	12-3-3-2-2	(.009)
7-6-4-2-1	(.164)	9-4-4-4-0	(.030)	11-6-2-2-1	(.006)
7-6-3-3-1	(.200)	9-4-4-3-1	(.107)	11-5-4-1-1	(.006)
7-5-5-3-0	(.071)	9-4-4-2-2	(.154)	11-5-3-2-1	(.013)
7-5-5-2-1	(.178)	9-4-3-3-2	(.195)	11-5-2-2-2	(.019)
7-5-4-4-0	(.094)	8-8-3-2-0	(.007)	11-4-4-3-0	(.005)
6-6-6-2-0	(.040)	8-8-3-1-1	(.016)	11-4-4-2-1	(.016)
6-6-6-1-1	(.080)	8-8-2-2-1	(.021)	11-4-3-3-1	(.021)
6-6-5-3-0	(.080)	8-7-5-1-0	(.005)	11-4-3-2-2	(.030)
6-6-4-4-0	(.107)	8-7-4-2-0	(.016)	11-3-3-3-2	(.043)
6-5-5-4-0	(.113)	8-7-4-1-1	(.032)	10-7-3-1-1	(.006)
5-5-5-5-0	(.136)	8-7-3-3-0	(.019)	10-7-2-2-1	(.009)
		8-7-3-2-1	(.063)	10-6-4-2-0	(.006)
N = 21		8-7-2-2-2	(.083)	10-6-4-1-1	(.012)
		8-6-6-1-0	(.007)	10-6-3-3-0	(.007)
12-3-2-2-2	(.006)	8-6-5-2-0	(.020)	10-6-3-2-1	(.024)
11-5-3-1-1	(.005)	8-6-5-1-1	(.042)	10-6-2-2-2	(.039)
11-5-2-2-1	(.008)	8-6-4-3-0	(.036)	10-5-5-2-0	(.007)
		8-6-4-2-1	(.102)	10-5-5-1-1	(.014)

10-5-4-3-0	(.012)	7-7-7-1-0	(.005)	10-5-4-3-1	(.066)
10-5-4-2-1	(.039)	7-7-6-2-0	(.020)	10-5-4-2-2	(.086)
10-5-3-3-1	(.048)	7-7-6-1-1	(.043)	10-5-3-3-2	(.106)
10-5-3-2-2	(.070)	7-7-5-3-0	(.043)	10-4-4-4-1	(.070)
10-4-4-4-0	(.014)	7-7-5-2-1	(.119)	10-4-4-3-2	(.131)
10-4-4-3-1	(.059)	7-7-4-4-0	(.050)	10-4-3-3-3	(.162)
10-4-4-2-2	(.083)	7-7-4-3-1	(.161)	9-9-2-2-1	(.007)
10-4-3-3-2	(.115)	7-6-6-3-0	(.048)	9-8-4-2-0	(.005)
10-3-3-3-3	(.133)	7-6-6-2-1	(.125)	9-8-4-1-1	(.010)
9-8-3-1-1	(.008)	7-6-5-4-0	(.070)	9-8-3-3-0	(.007)
9-8-2-2-1	(.012)	7-5-5-5-0	(.081)	9-8-3-2-1	(.022)
9-7-4-2-0	(.008)	6-6-6-4-0	(.080)	9-8-2-2-2	(.033)
9-7-4-1-1	(.016)	6-6-5-5-0	(.085)	9-7-5-2-0	(.008)
9-7-3-3-0	(.009)			9-7-5-1-1	(.018)
9-7-3-2-1	(.032)	N = 23		9-7-4-3-0	(.014)
9-7-2-2-2	(.050)			9-7-4-2-1	(.042)
9-6-5-2-0	(.012)			9-7-3-3-1	(.053)
9-6-5-1-1	(.024)	12-5-3-2-1	(.005)	9-7-3-2-2	(.080)
9-6-4-3-0	(.019)	12-5-2-2-2	(.007)	9-6-6-2-0	(.010)
9-6-4-2-1	(.059)	12-4-4-2-1	(.007)	9-6-6-1-1	(.021)
9-6-3-3-1	(.079)	12-4-3-3-1	(.008)	9-6-5-3-0	(.021)
9-6-3-2-2	(.115)	12-4-3-2-2	(.013)	9-6-5-2-1	(.066)
9-5-5-3-0	(.024)	12-3-3-3-2	(.019)	9-6-4-4-0	(.024)
9-5-5-2-1	(.070)	11-6-4-1-1	(.005)	9-6-4-3-1	(.094)
9-5-4-4-0	(.027)	11-6-3-2-1	(.011)	9-6-4-2-2	(.131)
9-5-4-3-1	(.115)	11-6-2-2-2	(.017)	9-6-3-3-2	(.162)
9-5-4-2-2	(.153)	11-5-5-1-1	(.006)	9-5-5-4-0	(.032)
9-5-3-3-2	(.178)	11-5-4-3-0	(.005)	9-5-5-3-1	(.106)
9-4-4-4-1	(.127)	11-5-4-2-1	(.017)	9-5-5-2-2	(.146)
8-8-4-2-0	(.008)	11-5-3-3-1	(.023)	9-5-4-4-1	(.131)
8-8-4-1-1	(.017)	11-5-3-2-2	(.035)	8-8-5-2-0	(.009)
8-8-3-3-0	(.012)	11-4-4-4-0	(.007)	8-8-5-1-1	(.019)
8-8-3-2-1	(.040)	11-4-4-3-1	(.028)	8-8-4-3-0	(.015)
8-8-2-2-2	(.052)	11-4-4-2-2	(.039)	8-8-4-2-1	(.047)
8-7-5-2-0	(.015)	11-4-3-3-2	(.051)	8-8-3-3-1	(.067)
8-7-5-1-1	(.029)	11-3-3-3-3	(.069)	8-8-3-2-2	(.087)
8-7-4-3-0	(.026)	10-8-2-2-1	(.006)	8-7-6-2-0	(.013)
8-7-4-2-1	(.076)	10-7-4-1-1	(.008)	8-7-6-1-1	(.027)
8-7-3-3-1	(.088)	10-7-3-3-0	(.006)	8-7-5-3-0	(.027)
8-7-3-2-2	(.132)	10-7-3-2-1	(.018)	8-7-5-2-1	(.076)
8-6-6-2-0	(.017)	10-7-2-2-2	(.027)	8-7-4-4-0	(.033)
8-6-6-1-1	(.039)	10-6-5-2-0	(.006)	8-7-4-3-1	(.115)
8-6-5-3-0	(.039)	10-6-5-1-1	(.012)	8-7-4-2-2	(.153)
8-6-5-2-1	(.097)	10-6-4-3-0	(.010)	8-7-3-3-2	(.199)
8-6-4-4-0	(.045)	10-6-4-2-1	(.032)	8-6-6-3-0	(.032)
8-6-4-3-1	(.153)	10-6-3-3-1	(.038)	8-6-6-2-1	(.086)
8-6-4-2-2	(.198)	10-6-3-2-2	(.066)	8-6-5-4-0	(.045)
8-5-5-4-0	(.052)	10-5-5-3-0	(.012)	8-6-5-3-1	(.146)
8-5-5-3-1	(.169)	10-5-5-2-1	(.037)	8-6-4-4-1	(.177)
8-5-4-4-1	(.198)	10-5-4-4-0	(.015)	8-5-5-5-0	(.049)

7-7-7-2-0	(.014)
7-7-7-1-1	(.028)
7-7-6-3-0	(.036)
7-7-6-2-1	(.098)
7-7-5-4-0	(.049)
7-7-5-3-1	(.169)
7-7-4-4-1	(.199)
7-6-6-4-0	(.066)
7-6-6-3-1	(.185)
7-6-5-5-0	(.069)
6-6-6-5-0	(.077)

N = 24

13-4-3-2-2	(.005)
13-3-3-3-2	(.007)
12-6-3-2-1	(.005)
12-6-2-2-2	(.007)
12-5-4-2-1	(.007)
12-5-3-3-1	(.010)
12-5-3-2-2	(.015)
12-4-4-3-1	(.012)
12-4-4-2-2	(.019)
12-4-3-3-2	(.024)
12-3-3-3-3	(.034)
11-7-3-2-1	(.008)
11-7-2-2-2	(.012)
11-6-5-1-1	(.006)
11-6-4-2-1	(.015)
11-6-3-3-1	(.020)
11-6-3-2-2	(.031)
11-5-5-3-0	(.006)
11-5-5-2-1	(.018)
11-5-4-4-0	(.007)
11-5-4-3-1	(.031)
11-5-4-2-2	(.041)
11-5-3-3-2	(.059)
11-4-4-4-1	(.037)
11-4-4-3-2	(.069)
11-4-3-3-3	(.085)
10-8-4-1-1	(.006)
10-8-3-2-1	(.012)
10-8-2-2-2	(.018)
10-7-5-1-1	(.009)
10-7-4-3-0	(.008)
10-7-4-2-1	(.024)
10-7-3-3-1	(.032)
10-7-3-2-2	(.046)
10-6-6-2-0	(.005)
10-6-6-1-1	(.011)
10-6-5-3-0	(.011)
10-6-5-2-1	(.034)
10-6-4-4-0	(.013)
10-6-4-3-1	(.054)
10-6-4-2-2	(.080)
10-6-3-3-2	(.095)
10-5-5-4-0	(.017)
10-5-5-3-1	(.063)
10-5-5-2-2	(.084)
10-5-4-4-1	(.080)
10-5-4-3-2	(.143)
10-5-3-3-3	(.167)
10-4-4-4-2	(.159)
9-9-4-1-1	(.006)
9-9-3-2-1	(.013)
9-9-2-2-2	(.020)
9-8-5-2-0	(.006)
9-8-5-1-1	(.012)
9-8-4-3-0	(.009)
9-8-4-2-1	(.028)
9-8-3-3-1	(.038)
9-8-3-2-2	(.057)
9-7-6-2-0	(.008)
9-7-6-1-1	(.016)
9-7-5-3-0	(.016)
9-7-5-2-1	(.046)
9-7-4-4-0	(.020)
9-7-4-3-1	(.074)
9-7-4-2-2	(.099)
9-7-3-3-2	(.118)
9-6-6-3-0	(.019)
9-6-6-2-1	(.054)
9-6-5-4-0	(.026)
9-6-5-3-1	(.095)
9-6-5-2-2	(.143)
9-6-4-4-1	(.105)
9-5-5-5-0	(.034)
9-5-5-4-1	(.143)
8-8-6-2-0	(.009)
8-8-6-1-1	(.018)
8-8-5-3-0	(.018)
8-8-5-2-1	(.049)
8-8-4-4-0	(.021)
8-8-4-3-1	(.083)
8-8-4-2-2	(.101)
8-8-3-3-2	(.151)
8-7-7-2-0	(.010)
8-7-7-1-1	(.021)
8-7-6-3-0	(.024)
8-7-6-2-1	(.067)
8-7-5-4-0	(.036)
8-7-5-3-1	(.113)
8-7-5-2-2	(.165)
8-7-4-4-1	(.151)
8-6-6-4-0	(.039)
8-6-6-3-1	(.143)
8-6-6-2-2	(.186)
8-6-5-5-0	(.048)
8-6-5-4-1	(.186)
7-7-7-3-0	(.025)
7-7-7-2-1	(.075)
7-7-6-4-0	(.046)
7-7-6-3-1	(.157)
7-6-6-5-0	(.063)
7-7-5-5-0	(.055)
6-6-6-6-0	(.069)

N = 25

13-5-3-2-2	(.006)
13-4-4-2-2	(.008)
13-4-3-3-2	(.010)
13-3-3-3-3	(.014)
12-7-2-2-2	(.006)
12-6-4-2-1	(.007)
12-6-3-3-1	(.009)
12-6-3-2-2	(.013)
12-5-5-2-1	(.008)
12-5-4-3-1	(.013)
12-5-4-2-2	(.020)
12-5-3-3-2	(.028)
12-4-4-4-1	(.018)
12-4-4-3-2	(.036)
12-4-3-3-3	(.046)
11-8-3-2-1	(.006)
11-8-2-2-2	(.009)
11-7-4-2-1	(.012)
11-7-3-3-1	(.016)
11-7-3-2-2	(.022)
11-6-6-1-1	(.005)
11-6-5-3-0	(.005)
11-6-5-2-1	(.018)
11-6-4-4-0	(.007)
11-6-4-3-1	(.028)
11-6-4-2-2	(.040)

11-6-3-3-2	(.054)	10-6-4-3-2	(.132)	9-6-6-3-1	(.088)
11-5-5-4-0	(.008)	10-6-3-3-3	(.156)	9-6-6-2-2	(.132)
11-5-5-3-1	(.035)	10-5-5-5-0	(.019)	9-6-5-5-0	(.029)
11-5-5-2-2	(.048)	10-5-5-4-1	(.082)	9-6-5-4-1	(.132)
11-5-4-4-1	(.040)	10-5-5-3-2	(.138)	9-5-5-5-1	(.138)
11-5-4-3-2	(.070)	10-5-4-4-2	(.182)	8-8-7-2-0	(.007)
11-5-3-3-3	(.095)	9-9-5-1-1	(.008)	8-8-7-1-1	(.014)
11-4-4-4-2	(.089)	9-9-4-3-0	(.006)	8-8-6-3-0	(.017)
11-4-4-3-3	(.110)	9-9-4-2-1	(.019)	8-8-6-2-1	(.047)
10-9-3-2-1	(.008)	9-9-3-3-1	(.023)	8-8-5-4-0	(.023)
10-9-2-2-2	(.011)	9-9-3-2-2	(.036)	8-8-5-3-1	(.085)
10-8-5-1-1	(.006)	9-8-6-2-0	(.005)	8-8-5-2-2	(.112)
10-8-4-3-0	(.005)	9-8-6-1-1	(.011)	8-8-4-4-1	(.097)
10-8-4-2-1	(.017)	9-8-5-3-0	(.011)	8-8-4-3-2	(.188)
10-8-3-3-1	(.022)	9-8-5-2-1	(.034)	8-7-7-3-0	(.019)
10-8-3-2-2	(.034)	9-8-4-4-0	(.012)	8-7-7-2-1	(.056)
10-7-6-1-1	(.009)	9-8-4-3-1	(.053)	8-7-6-4-0	(.034)
10-7-5-3-0	(.009)	9-8-4-2-2	(.066)	8-7-6-3-1	(.108)
10-7-5-2-1	(.025)	9-8-3-3-2	(.094)	8-7-6-2-2	(.154)
10-7-4-4-0	(.011)	9-7-7-2-0	(.006)	8-7-5-5-0	(.037)
10-7-4-3-1	(.044)	9-7-7-1-1	(.012)	8-7-5-4-1	(.154)
10-7-4-2-2	(.061)	9-7-6-3-0	(.014)	8-6-6-5-0	(.046)
10-7-3-3-2	(.077)	9-7-6-2-1	(.044)	8-6-6-4-1	(.182)
10-6-6-3-0	(.010)	9-7-5-4-0	(.022)	8-6-5-5-1	(.203)
10-6-6-2-1	(.029)	9-7-5-3-1	(.077)	7-7-7-4-0	(.036)
10-6-5-4-0	(.015)	9-7-5-2-2	(.108)	7-7-7-3-1	(.113)
10-6-5-3-1	(.059)	9-7-4-4-1	(.094)	7-7-7-2-2	(.169)
10-6-5-2-2	(.082)	9-7-4-3-2	(.168)	7-7-6-5-0	(.050)
10-6-4-4-1	(.063)	9-6-6-4-0	(.024)	7-7-6-4-1	(.195)
				7-6-6-6-0	(.059)

Table 15. Outcomes and corresponding significance levels ($.005 \leq P \leq .205$) in the multinomials, N=6,7,...,30; k=6; $\varphi_i = 1/6$ for each i.

N = 6		6-1-1-1-1-0	(.044)	6-2-1-1-1-1	(.195)
		5-4-1-0-0-0	(.007)	5-5-1-1-0-0	(.012)
4-2-0-0-0-0	(.014)	5-3-2-0-0-0	(.020)	5-4-3-0-0-0	(.011)
4-1-1-0-0-0	(.059)	5-3-1-1-0-0	(.044)	5-4-2-1-0-0	(.040)
3-3-0-0-0-0	(.020)	5-2-2-1-0-0	(.076)	5-4-1-1-1-0	(.104)
		5-2-1-1-1-0	(.181)	5-3-3-1-0-0	(.056)
N = 7		4-4-2-0-0-0	(.023)	5-3-2-2-0-0	(.104)
		4-4-1-1-0-0	(.054)	5-3-2-1-1-0	(.195)
5-1-1-0-0-0	(.016)	4-3-3-0-0-0	(.027)	4-4-4-0-0-0	(.012)
4-3-0-0-0-0	(.007)	4-3-2-1-0-0	(.151)	4-4-3-1-0-0	(.067)
4-2-1-0-0-0	(.061)	3-3-3-1-0-0	(.198)	4-4-2-2-0-0	(.113)
4-1-1-1-0-0	(.181)			4-3-3-2-0-0	(.135)
3-3-1-0-0-0	(.091)	N = 11		3-3-3-3-0-0	(.198)
3-2-2-0-0-0	(.181)				
		7-1-1-1-1-0	(.009)	N = 13	
		6-3-2-0-0-0	(.006)		
N = 8		6-3-1-1-0-0	(.015)	8-2-1-1-1-0	(.005)
		6-2-2-1-0-0	(.031)	8-1-1-1-1-1	(.009)
5-2-1-0-0-0	(.016)	6-2-1-1-1-0	(.067)	7-3-2-1-0-0	(.009)
5-1-1-1-0-0	(.048)	6-1-1-1-1-1	(.134)	7-3-1-1-1-0	(.016)
4-3-1-0-0-0	(.036)	5-4-2-0-0-0	(.008)	7-2-2-2-0-0	(.009)
4-2-2-0-0-0	(.063)	5-4-1-1-0-0	(.031)	7-2-2-1-1-0	(.027)
4-2-1-1-0-0	(.173)	5-3-3-0-0-0	(.015)	7-2-1-1-1-1	(.058)
3-3-2-0-0-0	(.083)	5-3-2-1-0-0	(.067)	6-4-2-1-0-0	(.014)
		5-3-1-1-1-0	(.134)	6-4-1-1-1-0	(.045)
N = 9		5-2-2-2-0-0	(.091)	6-3-3-1-0-0	(.023)
		4-4-3-0-0-0	(.017)	6-3-2-2-0-0	(.045)
6-1-1-1-0-0	(.013)	4-4-2-1-0-0	(.084)	6-3-2-1-1-0	(.088)
5-3-1-0-0-0	(.013)	4-4-1-1-1-0	(.179)	6-3-1-1-1-1	(.169)
5-2-2-0-0-0	(.021)	4-3-3-1-0-0	(.114)	6-2-2-2-1-0	(.140)
5-2-1-1-0-0	(.063)	4-3-2-2-0-0	(.179)	5-5-3-0-0-0	(.005)
5-1-1-1-1-0	(.121)			5-5-2-1-0-0	(.019)
4-4-1-0-0-0	(.017)	N = 12		5-5-1-1-1-0	(.047)
4-3-2-0-0-0	(.036)			5-4-4-0-0-0	(.006)
4-3-1-1-0-0	(.112)	7-2-2-1-0-0	(.007)	5-4-3-1-0-0	(.045)
4-2-2-1-0-0	(.188)	7-2-1-1-1-0	(.015)	5-4-2-2-0-0	(.057)
3-3-3-0-0-0	(.067)	7-1-1-1-1-1	(.041)	5-4-2-1-1-0	(.140)
		6-4-1-1-0-0	(.011)	5-3-3-2-0-0	(.088)
N = 10		6-3-3-0-0-0	(.005)	5-3-3-1-1-0	(.169)
		6-3-2-1-0-0	(.024)	4-4-4-1-0-0	(.049)
6-2-2-0-0-0	(.007)	6-3-1-1-1-0	(.056)	4-4-3-2-0-0	(.100)
6-2-1-1-0-0	(.020)	6-2-2-2-0-0	(.040)	4-4-3-1-1-0	(.194)
		6-2-2-1-1-0	(.104)	4-3-3-3-0-0	(.146)

N = 14

8-3-1-1-1-0	(.006)
8-2-2-1-1-0	(.010)
8-2-1-1-1-1	(.021)
7-4-2-1-0-0	(.006)
7-4-1-1-1-0	(.013)
7-3-3-1-0-0	(.007)
7-3-2-2-0-0	(.013)
7-3-2-1-1-0	(.034)
7-3-1-1-1-1	(.067)
7-2-2-2-1-0	(.043)
7-2-2-1-1-1	(.095)
6-5-2-1-0-0	(.009)
6-5-1-1-1-0	(.021)
6-4-3-1-0-0	(.017)
6-4-2-2-0-0	(.027)
6-4-2-1-1-0	(.066)
6-4-1-1-1-1	(.143)
6-3-3-2-0-0	(.039)
6-3-3-1-1-0	(.086)
6-3-2-2-1-0	(.143)
6-2-2-2-2-0	(.187)
5-5-3-1-0-0	(.021)
5-5-2-2-0-0	(.035)
5-5-2-1-1-0	(.074)
5-5-1-1-1-1	(.144)
5-4-4-1-0-0	(.027)
5-4-3-2-0-0	(.066)
5-4-3-1-1-0	(.143)
5-4-2-2-1-0	(.187)
5-3-3-3-0-0	(.086)
4-4-4-2-0-0	(.076)
4-4-4-1-1-0	(.149)
4-4-3-3-0-0	(.091)

N = 15

9-2-1-1-1-1	(.006)
8-3-2-2-0-0	(.005)
8-3-2-1-1-0	(.012)
8-3-1-1-1-1	(.023)
8-2-2-2-1-0	(.019)
8-2-2-1-1-1	(.041)
7-5-1-1-1-0	(.007)
7-4-3-1-0-0	(.006)
7-4-2-2-0-0	(.012)
7-4-2-1-1-0	(.023)
7-4-1-1-1-1	(.054)
7-3-3-2-0-0	(.015)
7-3-3-1-1-0	(.031)
7-3-2-2-1-0	(.054)
7-3-2-1-1-1	(.106)
7-2-2-2-2-0	(.079)
7-2-2-2-1-1	(.138)
6-6-1-1-1-0	(.009)
6-5-3-1-0-0	(.009)
6-5-2-2-0-0	(.018)
6-5-2-1-1-0	(.040)
6-5-1-1-1-1	(.075)
6-4-4-1-0-0	(.013)
6-4-3-2-0-0	(.028)
6-4-3-1-1-0	(.069)
6-4-2-2-1-0	(.100)
6-3-3-3-0-0	(.042)
6-3-3-2-1-0	(.134)
5-5-4-1-0-0	(.018)
5-5-3-2-0-0	(.040)
5-5-3-1-1-0	(.075)
5-5-2-2-1-0	(.114)
5-4-4-2-0-0	(.045)
5-4-4-1-1-0	(.100)
5-4-3-3-0-0	(.069)
4-4-4-3-0-0	(.077)

N = 16

9-3-1-1-1-1	(.007)
9-2-2-2-1-0	(.006)
9-2-2-1-1-1	(.013)
8-4-2-1-1-0	(.010)
8-4-1-1-1-1	(.023)
8-3-3-2-0-0	(.006)
8-3-3-1-1-0	(.013)
8-3-2-2-1-0	(.023)
8-3-2-1-1-1	(.047)
8-2-2-2-2-0	(.030)
8-2-2-2-1-1	(.074)
7-5-2-2-0-0	(.007)
7-5-2-1-1-0	(.015)
7-5-1-1-1-1	(.033)
7-4-4-1-0-0	(.006)
7-4-3-2-0-0	(.013)
7-4-3-1-1-0	(.028)
7-4-2-2-1-0	(.047)
7-4-2-1-1-1	(.081)
7-3-3-3-0-0	(.016)
7-3-3-2-1-0	(.060)
7-3-3-1-1-1	(.109)
7-3-2-2-2-0	(.081)
7-3-2-2-1-1	(.172)
6-6-3-1-0-0	(.005)
6-6-2-2-0-0	(.008)
6-6-2-1-1-0	(.020)
6-6-1-1-1-1	(.039)
6-5-4-1-0-0	(.008)
6-5-3-2-0-0	(.020)
6-5-3-1-1-0	(.039)
6-5-2-2-1-0	(.072)
6-5-2-1-1-1	(.130)
6-4-4-2-0-0	(.024)
6-4-4-1-1-0	(.053)
6-4-3-3-0-0	(.032)
6-4-3-2-1-0	(.107)
6-4-2-2-2-0	(.161)
6-3-3-3-1-0	(.136)
5-5-5-1-0-0	(.010)
5-5-4-2-0-0	(.030)
5-5-4-1-1-0	(.072)
5-5-3-3-0-0	(.039)
5-5-3-2-1-0	(.130)
5-5-2-2-2-0	(.176)
5-4-4-3-0-0	(.053)
5-4-4-2-1-0	(.161)
4-4-4-4-0-0	(.072)

N = 17

9-4-1-1-1-1	(.007)
9-3-2-2-1-0	(.007)
9-3-2-1-1-1	(.014)
9-2-2-2-2-0	(.012)
9-2-2-2-1-1	(.027)
8-5-2-1-1-0	(.006)
8-5-1-1-1-1	(.012)
8-4-3-2-0-0	(.005)
8-4-3-1-1-0	(.012)
8-4-2-2-1-0	(.017)
8-4-2-1-1-1	(.041)
8-3-3-3-0-0	(.007)
8-3-3-2-1-0	(.027)
8-3-3-1-1-1	(.054)
8-3-2-2-2-0	(.041)
8-3-2-2-1-1	(.081)
8-2-2-2-2-1	(.114)
7-6-2-1-1-0	(.009)
7-6-1-1-1-1	(.020)
7-5-3-2-0-0	(.009)
7-5-3-1-1-0	(.020)
7-5-2-2-1-0	(.031)

7-5-2-1-1-1	(.056)	8-5-2-1-1-1	(.028)	5-5-5-3-0-0	(.027)
7-4-4-2-0-0	(.012)	8-4-4-2-0-0	(.005)	5-5-5-2-1-0	(.076)
7-4-4-1-1-0	(.027)	8-4-4-1-1-0	(.010)	5-5-5-1-1-1	(.148)
7-4-3-3-0-0	(.014)	8-4-3-3-0-0	(.006)	5-5-4-4-0-0	(.031)
7-4-3-2-1-0	(.054)	8-4-3-2-1-0	(.025)	5-5-4-3-1-0	(.143)
7-4-3-1-1-1	(.099)	8-4-3-1-1-1	(.050)	5-5-4-2-2-0	(.183)
7-4-2-2-2-0	(.081)	8-4-2-2-2-0	(.032)	5-4-4-4-1-0	(.159)
7-4-2-2-1-1	(.146)	8-4-2-2-1-1	(.072)		
7-3-3-3-1-0	(.059)	8-3-3-3-1-0	(.030)		
7-3-3-2-2-0	(.099)	8-3-3-2-2-0	(.050)	N = 19	
7-3-3-2-1-1	(.196)	8-3-3-2-1-1	(.097)		
6-6-3-2-0-0	(.010)	8-3-2-2-2-1	(.147)	10-4-2-1-1-1	(.005)
6-6-3-1-1-0	(.022)	8-2-2-2-2-2	(.183)	10-3-3-1-1-1	(.007)
6-6-2-2-1-0	(.039)	7-7-1-1-1-1	(.009)	10-3-2-2-2-0	(.005)
6-6-2-1-1-1	(.074)	7-6-3-2-0-0	(.005)	10-3-2-2-1-1	(.012)
6-5-5-1-0-0	(.005)	7-6-3-1-1-0	(.012)	10-2-2-2-2-1	(.018)
6-5-4-2-0-0	(.015)	7-6-2-2-1-0	(.018)	9-5-2-1-1-1	(.012)
6-5-4-1-1-0	(.039)	7-6-2-1-1-1	(.039)	9-4-3-2-1-0	(.010)
6-5-3-3-0-0	(.022)	7-5-4-2-0-0	(.008)	9-4-3-1-1-1	(.019)
6-5-3-2-1-0	(.074)	7-5-4-1-1-0	(.018)	9-4-2-2-2-0	(.014)
6-5-3-1-1-1	(.139)	7-5-3-3-0-0	(.012)	9-4-2-2-1-1	(.029)
6-5-2-2-2-0	(.113)	7-5-3-2-1-0	(.039)	9-3-3-3-1-0	(.012)
6-4-4-3-0-0	(.028)	7-5-3-1-1-1	(.074)	9-3-3-2-2-0	(.019)
6-4-4-2-1-0	(.090)	7-5-2-2-2-0	(.052)	9-3-3-2-1-1	(.037)
6-4-4-1-1-1	(.186)	7-5-2-2-1-1	(.111)	9-3-2-2-2-1	(.062)
6-4-3-3-1-0	(.126)	7-4-4-3-0-0	(.015)	9-2-2-2-2-2	(.096)
6-4-3-2-2-0	(.186)	7-4-4-2-1-0	(.050)	8-6-3-1-1-0	(.005)
5-5-5-2-0-0	(.020)	7-4-4-1-1-1	(.097)	8-6-2-2-1-0	(.008)
5-5-5-1-1-0	(.042)	7-4-3-3-1-0	(.057)	8-6-2-1-1-1	(.018)
5-5-4-3-0-0	(.039)	7-4-3-2-2-0	(.097)	8-5-4-1-1-0	(.008)
5-5-4-2-1-0	(.113)	7-4-3-2-1-1	(.175)	8-5-3-2-1-0	(.018)
5-5-3-3-1-0	(.139)	7-3-3-3-2-0	(.115)	8-5-3-1-1-1	(.036)
5-4-4-4-0-0	(.043)	7-3-3-3-1-1	(.205)	8-5-2-2-2-0	(.026)
5-4-4-3-1-0	(.186)	6-6-4-2-0-0	(.010)	8-5-2-2-1-1	(.053)
		6-6-4-1-1-0	(.021)	8-4-4-3-0-0	(.006)
N = 18		6-6-3-3-0-0	(.014)	8-4-4-2-1-0	(.022)
		6-6-3-2-1-0	(.043)	8-4-4-1-1-1	(.044)
10-3-2-1-1-1	(.005)	6-6-3-1-1-1	(.084)	8-4-3-3-1-0	(.029)
10-2-2-2-1-1	(.008)	6-6-2-2-2-0	(.069)	8-4-3-2-2-0	(.044)
9-5-1-1-1-1	(.005)	6-6-2-2-1-1	(.143)	8-4-3-2-1-1	(.096)
9-4-2-2-1-0	(.006)	6-5-5-2-0-0	(.012)	8-4-2-2-2-1	(.128)
9-4-2-1-1-1	(.015)	6-5-5-1-1-0	(.027)	8-3-3-3-2-0	(.062)
9-3-3-2-1-0	(.009)	6-5-4-3-0-0	(.021)	8-3-3-3-1-1	(.111)
9-3-3-1-1-1	(.019)	6-5-4-2-1-0	(.069)	8-3-3-2-2-1	(.170)
9-3-2-2-2-0	(.015)	6-5-4-1-1-1	(.143)	7-7-3-1-1-0	(.006)
9-3-2-2-1-1	(.030)	6-5-3-3-1-0	(.084)	7-7-2-2-1-0	(.010)
9-2-2-2-2-1	(.050)	6-5-3-2-2-0	(.143)	7-7-2-1-1-1	(.020)
8-6-1-1-1-1	(.008)	6-4-4-4-0-0	(.027)	7-6-4-2-0-0	(.005)
8-5-3-1-1-0	(.008)	6-4-4-3-1-0	(.107)	7-6-4-1-1-0	(.012)
8-5-2-2-1-0	(.013)	6-4-4-2-2-0	(.159)	7-6-3-3-0-0	(.007)
		6-4-3-3-2-0	(.201)	7-6-3-2-1-0	(.025)

7-6-3-1-1-1	(.048)	10-3-2-2-2-1	(.025)	7-6-3-2-2-0	(.050)
7-6-2-2-2-0	(.036)	10-2-2-2-2-2	(.037)	7-6-3-2-1-1	(.096)
7-6-2-2-1-1	(.071)	9-6-2-1-1-1	(.008)	7-6-2-2-2-1	(.128)
7-5-5-2-0-0	(.006)	9-5-3-2-1-0	(.008)	7-5-5-3-0-0	(.009)
7-5-5-1-1-0	(.013)	9-5-3-1-1-1	(.015)	7-5-5-2-1-0	(.027)
7-5-4-3-0-0	(.012)	9-5-2-2-2-0	(.012)	7-5-5-1-1-1	(.054)
7-5-4-2-1-0	(.036)	9-5-2-2-1-1	(.025)	7-5-4-4-0-0	(.012)
7-5-4-1-1-1	(.071)	9-4-4-2-1-0	(.009)	7-5-4-3-1-0	(.050)
7-5-3-3-1-0	(.048)	9-4-4-1-1-1	(.019)	7-5-4-2-2-0	(.073)
7-5-3-2-2-0	(.071)	9-4-3-3-1-0	(.013)	7-5-4-2-1-1	(.128)
7-5-3-2-1-1	(.137)	9-4-3-2-2-0	(.019)	7-5-3-3-2-0	(.096)
7-5-2-2-2-1	(.189)	9-4-3-2-1-1	(.039)	7-5-3-3-1-1	(.171)
7-4-4-4-0-0	(.014)	9-4-2-2-2-1	(.060)	7-4-4-4-1-0	(.060)
7-4-4-3-1-0	(.062)	9-3-3-3-2-0	(.025)	7-4-4-3-2-0	(.117)
7-4-4-2-2-0	(.096)	9-3-3-3-1-1	(.050)	7-4-4-3-1-1	(.204)
7-4-4-2-1-1	(.170)	9-3-3-2-2-1	(.075)	7-4-3-3-3-0	(.131)
7-4-3-3-2-0	(.111)	9-3-2-2-2-2	(.117)	6-6-6-2-0-0	(.005)
7-4-3-3-1-1	(.197)	8-7-2-2-1-0	(.005)	6-6-6-1-1-0	(.010)
7-3-3-3-3-0	(.140)	8-7-2-1-1-1	(.009)	6-6-5-3-0-0	(.010)
6-6-5-2-0-0	(.007)	8-6-4-1-1-0	(.005)	6-6-5-2-1-0	(.033)
6-6-5-1-1-0	(.015)	8-6-3-2-1-0	(.012)	6-6-5-1-1-1	(.064)
6-6-4-3-0-0	(.013)	8-6-3-1-1-1	(.025)	6-6-4-4-0-0	(.014)
6-6-4-2-1-0	(.040)	8-6-2-2-2-0	(.018)	6-6-4-3-1-0	(.054)
6-6-4-1-1-1	(.087)	8-6-2-2-1-1	(.037)	6-6-4-2-2-0	(.083)
6-6-3-3-1-0	(.055)	8-5-5-1-1-0	(.006)	6-6-4-2-1-1	(.155)
6-6-3-2-2-0	(.087)	8-5-4-3-0-0	(.005)	6-6-3-3-2-0	(.106)
6-6-3-2-1-1	(.157)	8-5-4-2-1-0	(.018)	6-6-3-3-1-1	(.192)
6-5-5-3-0-0	(.015)	8-5-4-1-1-1	(.037)	6-5-5-4-0-0	(.015)
6-5-5-2-1-0	(.051)	8-5-3-3-1-0	(.025)	6-5-5-3-1-0	(.064)
6-5-5-1-1-1	(.099)	8-5-3-2-2-0	(.037)	6-5-5-2-2-0	(.101)
6-5-4-4-0-0	(.020)	8-5-3-2-1-1	(.073)	6-5-5-2-1-1	(.181)
6-5-4-3-1-0	(.087)	8-5-2-2-2-1	(.103)	6-5-4-4-1-0	(.083)
6-5-4-2-2-0	(.124)	8-4-4-4-0-0	(.006)	6-5-4-3-2-0	(.155)
6-5-3-3-2-0	(.157)	8-4-4-3-1-0	(.029)	6-5-3-3-3-0	(.192)
6-4-4-4-1-0	(.102)	8-4-4-2-2-0	(.041)	6-4-4-4-2-0	(.185)
6-4-4-3-2-0	(.184)	8-4-4-2-1-1	(.085)	5-5-5-5-0-0	(.019)
5-5-5-4-0-0	(.025)	8-4-3-3-2-0	(.060)	5-5-5-4-1-0	(.101)
5-5-5-3-1-0	(.099)	8-4-3-3-1-1	(.117)	5-5-5-3-2-0	(.181)
5-5-5-2-2-0	(.139)	8-4-3-2-2-1	(.166)		
5-5-4-4-1-0	(.124)	8-3-3-3-3-0	(.075)		
		8-3-3-3-2-1	(.204)	N = 21	
N = 20		7-7-4-1-1-0	(.006)		
		7-7-3-2-1-0	(.014)	11-3-3-2-1-1	(.005)
11-2-2-2-2-1	(.006)	7-7-3-1-1-1	(.026)	11-3-2-2-2-1	(.009)
10-4-3-1-1-1	(.008)	7-7-2-2-2-0	(.019)	11-2-2-2-2-2	(.012)
10-4-2-2-2-0	(.005)	7-7-2-2-1-1	(.040)	10-5-3-1-1-1	(.006)
10-4-2-2-1-1	(.012)	7-6-5-1-1-0	(.009)	10-5-2-2-1-1	(.009)
10-3-3-3-1-0	(.005)	7-6-4-3-0-0	(.008)	10-4-4-1-1-1	(.009)
10-3-3-2-2-0	(.008)	7-6-4-2-1-0	(.025)	10-4-3-3-1-0	(.005)
10-3-3-2-1-1	(.015)	7-6-4-1-1-1	(.050)	10-4-3-2-2-0	(.009)
		7-6-3-3-1-0	(.031)	10-4-3-2-1-1	(.017)

10-4-2-2-2-1	(.026)	7-7-4-2-1-0	(.013)	11-3-3-3-1-1	(.008)
10-3-3-3-2-0	(.010)	7-7-4-1-1-1	(.028)	11-3-3-2-2-1	(.013)
10-3-3-3-1-1	(.021)	7-7-3-3-1-0	(.018)	11-3-2-2-2-2	(.018)
10-3-3-2-2-1	(.034)	7-7-3-2-2-0	(.028)	10-6-2-2-1-1	(.007)
10-3-2-2-2-2	(.053)	7-7-3-2-1-1	(.055)	10-5-4-1-1-1	(.007)
9-6-3-2-1-0	(.005)	7-7-2-2-2-1	(.081)	10-5-3-2-2-0	(.007)
9-6-3-1-1-1	(.010)	7-6-6-1-1-0	(.006)	10-5-3-2-1-1	(.014)
9-6-2-2-2-0	(.009)	7-6-5-3-0-0	(.006)	10-5-2-2-2-1	(.020)
9-6-2-2-1-1	(.017)	7-6-5-2-1-0	(.020)	10-4-4-3-1-0	(.005)
9-5-4-2-1-0	(.009)	7-6-5-1-1-1	(.039)	10-4-4-2-2-0	(.008)
9-5-4-1-1-1	(.017)	7-6-4-4-0-0	(.009)	10-4-4-2-1-1	(.018)
9-5-3-3-1-0	(.010)	7-6-4-3-1-0	(.034)	10-4-3-3-2-0	(.012)
9-5-3-2-2-0	(.017)	7-6-4-2-2-0	(.053)	10-4-3-3-1-1	(.023)
9-5-3-2-1-1	(.034)	7-6-4-2-1-1	(.098)	10-4-3-2-2-1	(.038)
9-5-2-2-2-1	(.053)	7-6-3-3-2-0	(.064)	10-4-2-2-2-2	(.055)
9-4-4-3-1-0	(.012)	7-6-3-3-1-1	(.119)	10-3-3-3-3-0	(.015)
9-4-4-2-2-0	(.020)	7-6-3-2-2-1	(.175)	10-3-3-3-2-1	(.046)
9-4-4-2-1-1	(.040)	7-5-5-4-0-0	(.009)	10-3-3-2-2-2	(.072)
9-4-3-3-2-0	(.027)	7-5-5-3-1-0	(.039)	9-7-3-1-1-1	(.006)
9-4-3-3-1-1	(.054)	7-5-5-2-2-0	(.058)	9-7-2-2-2-0	(.005)
9-4-3-2-2-1	(.080)	7-5-5-2-1-1	(.108)	9-7-2-2-1-1	(.009)
9-4-2-2-2-2	(.113)	7-5-4-4-1-0	(.053)	9-6-4-2-1-0	(.005)
9-3-3-3-3-0	(.034)	7-5-4-3-2-0	(.098)	9-6-4-1-1-1	(.012)
9-3-3-3-2-1	(.099)	7-5-4-3-1-1	(.175)	9-6-3-3-1-0	(.008)
9-3-3-2-2-2	(.143)	7-5-3-3-3-0	(.119)	9-6-3-2-2-0	(.012)
8-7-3-2-1-0	(.007)	7-4-4-4-2-0	(.113)	9-6-3-2-1-1	(.023)
8-7-3-1-1-1	(.013)	7-4-4-3-3-0	(.143)	9-6-2-2-2-1	(.038)
8-7-2-2-2-0	(.009)	6-6-6-3-0-0	(.007)	9-5-5-2-1-0	(.007)
8-7-2-2-1-1	(.021)	6-6-6-2-1-0	(.021)	9-5-5-1-1-1	(.014)
8-6-4-2-1-0	(.012)	6-6-6-1-1-1	(.042)	9-5-4-3-1-0	(.012)
8-6-4-1-1-1	(.026)	6-6-5-4-0-0	(.010)	9-5-4-2-2-0	(.018)
8-6-3-3-1-0	(.017)	6-6-5-3-1-0	(.042)	9-5-4-2-1-1	(.038)
8-6-3-2-2-0	(.026)	6-6-5-2-2-0	(.070)	9-5-3-3-2-0	(.023)
8-6-3-2-1-1	(.053)	6-6-5-2-1-1	(.129)	9-5-3-3-1-1	(.046)
8-6-2-2-2-1	(.074)	6-6-4-4-1-0	(.057)	9-5-3-2-2-1	(.072)
8-5-5-2-1-0	(.014)	6-6-4-3-2-0	(.105)	9-5-2-2-2-2	(.103)
8-5-5-1-1-1	(.028)	6-6-4-3-1-1	(.196)	9-4-4-4-1-0	(.015)
8-5-4-4-0-0	(.006)	6-6-3-3-3-0	(.137)	9-4-4-3-2-0	(.029)
8-5-4-3-1-0	(.026)	6-5-5-5-0-0	(.012)	9-4-4-3-1-1	(.056)
8-5-4-2-2-0	(.036)	6-5-5-4-1-0	(.070)	9-4-4-2-2-1	(.084)
8-5-4-2-1-1	(.074)	6-5-5-3-2-0	(.129)	9-4-3-3-3-0	(.039)
8-5-3-3-2-0	(.053)	6-5-4-4-2-0	(.151)	9-4-3-3-2-1	(.108)
8-5-3-3-1-1	(.098)	6-5-4-3-3-0	(.196)	9-4-3-2-2-2	(.152)
8-5-3-2-2-1	(.136)	5-5-5-5-1-0	(.080)	9-3-3-3-3-1	(.133)
8-5-2-2-2-2	(.179)	5-5-5-4-2-0	(.178)	9-3-3-3-2-2	(.185)
8-4-4-4-1-0	(.029)			8-8-3-3-1-1	(.008)
8-4-4-3-2-0	(.061)			8-8-2-2-2-0	(.005)
8-4-4-3-1-1	(.113)	N = 22		8-8-2-2-1-1	(.010)
8-4-4-2-2-1	(.156)			8-7-4-2-1-0	(.008)
8-4-3-3-3-0	(.080)	11-4-3-2-1-1	(.006)	8-7-4-1-1-1	(.015)
7-7-5-1-1-0	(.005)	11-4-2-2-2-1	(.008)	8-7-3-3-1-0	(.009)

8-7-3-2-2-0	(.015)	7-5-4-4-1-1	(.183)	10-4-3-2-2-2	(.079)
8-7-3-2-1-1	(.031)	7-5-4-3-3-0	(.126)	10-3-3-3-3-1	(.065)
8-7-2-2-2-1	(.044)	7-4-4-4-3-0	(.152)	10-3-3-3-2-2	(.095)
8-6-5-2-1-0	(.010)	6-6-6-4-0-0	(.008)	9-8-2-2-1-1	(.006)
8-6-5-1-1-1	(.020)	6-6-6-3-1-0	(.032)	9-7-4-1-1-1	(.007)
8-6-4-3-1-0	(.018)	6-6-6-2-2-0	(.048)	9-7-3-2-2-0	(.007)
8-6-4-2-2-0	(.025)	6-6-6-2-1-1	(.090)	9-7-3-2-1-1	(.014)
8-6-4-2-1-1	(.055)	6-6-5-5-0-0	(.009)	9-7-2-2-2-1	(.022)
8-6-3-3-2-0	(.038)	6-6-5-4-1-0	(.048)	9-6-5-2-1-0	(.005)
8-6-3-3-1-1	(.072)	6-6-5-3-2-0	(.090)	9-6-5-1-1-1	(.010)
8-6-3-2-2-1	(.103)	6-6-5-3-1-1	(.161)	9-6-4-3-1-0	(.009)
8-6-2-2-2-2	(.140)	6-6-4-4-2-0	(.113)	9-6-4-2-2-0	(.013)
8-5-5-4-0-0	(.005)	6-6-4-4-1-1	(.198)	9-6-4-2-1-1	(.027)
8-5-5-3-1-0	(.020)	6-6-4-3-3-0	(.143)	9-6-3-3-2-0	(.018)
8-5-5-2-2-0	(.032)	6-5-5-5-1-0	(.057)	9-6-3-3-1-1	(.035)
8-5-5-2-1-1	(.059)	6-5-5-4-2-0	(.132)	9-6-3-2-2-1	(.053)
8-5-4-4-1-0	(.025)	6-5-5-3-3-0	(.161)	9-6-2-2-2-2	(.079)
8-5-4-3-2-0	(.055)	6-5-4-4-3-0	(.198)	9-5-5-3-1-0	(.010)
8-5-4-3-1-1	(.103)	5-5-5-5-2-0	(.152)	9-5-5-2-2-0	(.016)
8-5-4-2-2-1	(.140)			9-5-5-2-1-1	(.032)
8-5-3-3-3-0	(.072)	N = 23		9-5-4-4-1-0	(.013)
8-5-3-3-2-1	(.183)			9-5-4-3-2-0	(.027)
8-4-4-4-2-0	(.060)			9-5-4-3-1-1	(.053)
8-4-4-4-1-1	(.114)	12-3-2-2-2-2	(.007)	9-5-4-2-2-1	(.079)
8-4-4-3-3-0	(.084)	11-5-3-2-1-1	(.006)	9-5-3-3-3-0	(.035)
7-7-5-2-1-0	(.013)	11-5-2-2-2-1	(.008)	9-5-3-3-2-1	(.095)
7-7-5-1-1-1	(.023)	11-4-4-2-1-1	(.007)	9-5-3-2-2-2	(.143)
7-7-4-3-1-0	(.019)	11-4-3-3-1-1	(.009)	9-4-4-4-2-0	(.033)
7-7-4-2-2-0	(.031)	11-4-3-2-2-1	(.013)	9-4-4-4-1-1	(.063)
7-7-4-2-1-1	(.058)	11-4-2-2-2-2	(.021)	9-4-4-3-3-0	(.040)
7-7-3-3-2-0	(.040)	11-3-3-3-3-0	(.006)	9-4-4-3-2-1	(.117)
7-7-3-3-1-1	(.073)	11-3-3-3-2-1	(.019)	9-4-4-2-2-2	(.163)
7-7-3-2-2-1	(.111)	11-3-3-2-2-2	(.028)	9-4-3-3-3-1	(.145)
7-7-2-2-2-2	(.153)	10-6-4-1-1-1	(.005)	9-4-3-3-2-2	(.201)
7-6-6-2-1-0	(.014)	10-6-3-2-2-0	(.005)	8-8-4-1-1-1	(.008)
7-6-6-1-1-1	(.028)	10-6-3-2-1-1	(.010)	8-8-3-3-1-0	(.006)
7-6-5-4-0-0	(.007)	10-6-2-2-2-1	(.016)	8-8-3-2-2-0	(.008)
7-6-5-3-1-0	(.028)	10-5-5-1-1-1	(.006)	8-8-3-2-1-1	(.017)
7-6-5-2-2-0	(.043)	10-5-4-3-1-0	(.005)	8-8-2-2-2-1	(.024)
7-6-5-2-1-1	(.080)	10-5-4-2-2-0	(.008)	8-7-5-2-1-0	(.007)
7-6-4-4-1-0	(.038)	10-5-4-2-1-1	(.016)	8-7-5-1-1-1	(.013)
7-6-4-3-2-0	(.072)	10-5-3-3-2-0	(.010)	8-7-4-3-1-0	(.011)
7-6-4-3-1-1	(.126)	10-5-3-3-1-1	(.021)	8-7-4-2-2-0	(.017)
7-6-4-2-2-1	(.183)	10-5-3-2-2-1	(.032)	8-7-4-2-1-1	(.034)
7-6-3-3-3-0	(.085)	10-5-2-2-2-2	(.047)	8-7-3-3-2-0	(.022)
7-5-5-5-0-0	(.008)	10-4-4-4-1-0	(.006)	8-7-3-3-1-1	(.044)
7-5-5-4-1-0	(.043)	10-4-4-3-2-0	(.013)	8-7-3-2-2-1	(.065)
7-5-5-3-2-0	(.080)	10-4-4-3-1-1	(.027)	8-7-2-2-2-2	(.087)
7-5-5-3-1-1	(.147)	10-4-4-2-2-1	(.040)	8-6-6-2-1-0	(.008)
7-5-5-2-2-1	(.203)	10-4-3-3-3-0	(.018)	8-6-6-1-1-1	(.016)
7-5-4-4-2-0	(.103)	10-4-3-3-2-1	(.053)	8-6-5-3-1-0	(.016)

8-6-5-2-2-0	(.024)	6-6-6-2-2-1	(.176)	10-4-4-4-1-1	(.030)
8-6-5-2-1-1	(.047)	6-6-5-5-1-0	(.041)	10-4-4-3-3-0	(.020)
8-6-4-4-1-0	(.019)	6-6-5-4-2-0	(.099)	10-4-4-3-2-1	(.059)
8-6-4-3-2-0	(.040)	6-6-5-4-1-1	(.176)	10-4-4-2-2-2	(.083)
8-6-4-3-1-1	(.079)	6-6-5-3-3-0	(.127)	10-4-3-3-3-1	(.076)
8-6-4-2-2-1	(.105)	6-6-4-4-3-0	(.151)	10-4-3-3-2-2	(.114)
8-6-3-3-3-0	(.053)	6-5-5-5-2-0	(.118)	10-3-3-3-3-2	(.132)
8-6-3-3-2-1	(.143)	6-5-5-5-1-1	(.203)	9-8-3-2-1-1	(.009)
8-6-3-2-2-2	(.196)	6-5-5-4-3-0	(.176)	9-8-2-2-2-1	(.014)
8-5-5-4-1-0	(.024)	5-5-5-5-3-0	(.203)	9-7-5-1-1-1	(.007)
8-5-5-3-2-0	(.047)			9-7-4-3-1-0	(.006)
8-5-5-3-1-1	(.085)			9-7-4-2-2-0	(.009)
8-5-5-2-2-1	(.123)	N = 24		9-7-4-2-1-1	(.017)
8-5-4-4-2-0	(.056)			9-7-3-3-2-0	(.011)
8-5-4-4-1-1	(.105)	12-4-3-2-2-1	(.005)	9-7-3-3-1-1	(.022)
8-5-4-3-3-0	(.079)	12-4-2-2-2-2	(.008)	9-7-3-2-2-1	(.033)
8-5-4-3-2-1	(.196)	12-3-3-3-2-1	(.007)	9-7-2-2-2-2	(.051)
8-4-4-4-3-0	(.087)	12-3-3-2-2-2	(.010)	9-6-6-1-1-1	(.008)
7-7-6-2-1-0	(.009)	11-6-2-2-2-1	(.007)	9-6-5-3-1-0	(.008)
7-7-6-1-1-1	(.019)	11-5-4-2-1-1	(.007)	9-6-5-2-2-0	(.013)
7-7-5-3-1-0	(.019)	11-5-3-3-1-1	(.009)	9-6-5-2-1-1	(.026)
7-7-5-2-2-0	(.028)	11-5-3-2-2-1	(.014)	9-6-4-4-1-0	(.009)
7-7-5-2-1-1	(.054)	11-5-2-2-2-2	(.018)	9-6-4-3-2-0	(.020)
7-7-4-4-1-0	(.022)	11-4-4-3-2-0	(.005)	9-6-4-3-1-1	(.040)
7-7-4-3-2-0	(.044)	11-4-4-3-1-1	(.010)	9-6-4-2-2-1	(.059)
7-7-4-3-1-1	(.080)	11-4-4-2-2-1	(.016)	9-6-3-3-3-0	(.028)
7-7-4-2-2-1	(.121)	11-4-3-3-3-0	(.007)	9-6-3-3-2-1	(.076)
7-7-3-3-3-0	(.057)	11-4-3-3-2-1	(.022)	9-6-3-2-2-2	(.114)
7-7-3-3-2-1	(.148)	11-4-3-2-2-2	(.031)	9-5-5-4-1-0	(.013)
7-7-3-2-2-2	(.205)	11-3-3-3-3-1	(.029)	9-5-5-3-2-0	(.026)
7-6-6-3-1-0	(.021)	11-3-3-3-2-2	(.042)	9-5-5-3-1-1	(.048)
7-6-6-2-2-0	(.032)	10-7-3-2-1-1	(.007)	9-5-5-2-2-1	(.070)
7-6-6-2-1-1	(.062)	10-7-2-2-2-1	(.010)	9-5-4-4-2-0	(.030)
7-6-5-5-0-0	(.006)	10-6-5-1-1-1	(.005)	9-5-4-4-1-1	(.059)
7-6-5-4-1-0	(.032)	10-6-4-2-2-0	(.006)	9-5-4-3-3-0	(.040)
7-6-5-3-2-0	(.062)	10-6-4-2-1-1	(.013)	9-5-4-3-2-1	(.114)
7-6-5-3-1-1	(.112)	10-6-3-3-2-0	(.008)	9-5-4-2-2-2	(.154)
7-6-5-2-2-1	(.162)	10-6-3-3-1-1	(.016)	9-5-3-3-3-1	(.132)
7-6-4-4-2-0	(.079)	10-6-3-2-2-1	(.026)	9-5-3-3-2-2	(.182)
7-6-4-4-1-1	(.143)	10-6-2-2-2-2	(.037)	9-4-4-4-3-0	(.048)
7-6-4-3-3-0	(.095)	10-5-5-3-1-0	(.005)	9-4-4-4-2-1	(.129)
7-5-5-5-1-0	(.036)	10-5-5-2-2-0	(.007)	9-4-4-3-3-1	(.158)
7-5-5-4-2-0	(.085)	10-5-5-2-1-1	(.015)	8-8-5-1-1-1	(.007)
7-5-5-4-1-1	(.162)	10-5-4-4-1-0	(.006)	8-8-4-3-1-0	(.006)
7-5-5-3-3-0	(.112)	10-5-4-3-2-0	(.013)	8-8-4-2-2-0	(.009)
7-5-4-4-3-0	(.143)	10-5-4-3-1-1	(.026)	8-8-4-2-1-1	(.018)
7-4-4-4-4-0	(.163)	10-5-4-2-2-1	(.037)	8-8-3-3-2-0	(.014)
6-6-6-5-0-0	(.007)	10-5-3-3-3-0	(.016)	8-8-3-3-1-1	(.028)
6-6-6-4-1-0	(.036)	10-5-3-3-2-1	(.048)	8-8-3-2-2-1	(.038)
6-6-6-3-2-0	(.066)	10-5-3-2-2-2	(.070)	8-8-2-2-2-2	(.052)
6-6-6-3-1-1	(.127)	10-4-4-4-2-0	(.015)	8-7-6-2-1-0	(.005)

8-7-6-1-1-1	(.010)	7-6-5-4-2-0	(.070)	10-7-3-3-2-0	(.006)
8-7-5-3-1-0	(.010)	7-6-5-4-1-1	(.127)	10-7-3-3-1-1	(.011)
8-7-5-2-2-0	(.015)	7-6-5-3-3-0	(.088)	10-7-3-2-2-1	(.017)
8-7-5-2-1-1	(.031)	7-6-4-4-3-0	(.114)	10-7-2-2-2-2	(.026)
8-7-4-4-1-0	(.014)	7-5-5-5-2-0	(.079)	10-6-5-2-1-1	(.012)
8-7-4-3-2-0	(.028)	7-5-5-5-1-1	(.139)	10-6-5-2-2-0	(.006)
8-7-4-3-1-1	(.051)	7-5-5-4-3-0	(.127)	10-6-4-3-2-0	(.010)
8-7-4-2-2-1	(.072)	7-5-4-4-4-0	(.154)	10-6-4-3-1-1	(.020)
8-7-3-3-3-0	(.033)	6-6-6-6-0-0	(.005)	10-6-4-2-2-1	(.030)
8-7-3-3-2-1	(.093)	6-6-6-5-1-0	(.032)	10-6-3-3-3-0	(.013)
8-7-3-2-2-2	(.130)	6-6-6-4-2-0	(.078)	10-6-3-3-2-1	(.037)
8-6-6-3-1-0	(.013)	6-6-6-4-1-1	(.138)	10-6-3-2-2-2	(.059)
8-6-6-2-2-0	(.018)	6-6-6-3-3-0	(.099)	10-5-5-4-1-0	(.006)
8-6-6-2-1-1	(.037)	6-6-5-5-2-0	(.089)	10-5-5-3-2-0	(.012)
8-6-5-4-1-0	(.018)	6-6-5-5-1-1	(.161)	10-5-5-3-1-1	(.023)
8-6-5-3-2-0	(.037)	6-6-5-4-3-0	(.138)	10-5-5-2-2-1	(.034)
8-6-5-3-1-1	(.070)	6-6-4-4-4-0	(.169)	10-5-4-4-2-0	(.015)
8-6-5-2-2-1	(.099)	6-5-5-5-3-0	(.161)	10-5-4-4-1-1	(.030)
8-6-4-4-2-0	(.044)	6-5-5-4-4-0	(.186)	10-5-4-3-3-0	(.020)
8-6-4-4-1-1	(.083)			10-5-4-3-2-1	(.059)
8-6-4-3-3-0	(.059)	N = 25		10-5-4-2-2-2	(.081)
8-6-4-3-2-1	(.154)			10-5-3-3-3-1	(.071)
8-6-4-2-2-2	(.197)			10-5-3-3-2-2	(.104)
8-6-3-3-3-1	(.182)	12-5-3-2-2-1	(.005)	10-4-4-4-3-0	(.024)
8-5-5-5-1-0	(.021)	12-5-2-2-2-2	(.007)	10-4-4-4-2-1	(.068)
8-5-5-4-2-0	(.052)	12-4-4-2-2-1	(.007)	10-4-4-3-3-1	(.088)
8-5-5-4-1-1	(.099)	12-4-3-3-2-1	(.009)	10-4-4-3-2-2	(.125)
8-5-5-3-3-0	(.070)	12-4-3-2-2-2	(.013)	10-4-3-3-3-2	(.153)
8-5-5-3-2-1	(.176)	12-3-3-3-3-1	(.012)	10-3-3-3-3-3	(.185)
8-5-4-4-3-0	(.083)	12-3-3-3-2-2	(.018)	9-9-2-2-2-1	(.007)
8-5-4-4-2-1	(.197)	11-6-4-2-1-1	(.005)	9-8-4-2-2-0	(.005)
8-4-4-4-4-0	(.099)	11-6-3-3-1-1	(.007)	9-8-4-2-1-1	(.010)
7-7-7-2-1-0	(.006)	11-6-3-2-2-1	(.011)	9-8-3-3-2-0	(.007)
7-7-7-1-1-1	(.011)	11-6-2-2-2-2	(.016)	9-8-3-3-1-1	(.014)
7-7-6-3-1-0	(.014)	11-5-5-2-1-1	(.006)	9-8-3-2-2-1	(.021)
7-7-6-2-2-0	(.021)	11-5-4-3-2-0	(.005)	9-8-2-2-2-2	(.031)
7-7-6-2-1-1	(.042)	11-5-4-3-1-1	(.011)	9-7-6-1-1-1	(.006)
7-7-5-4-1-0	(.021)	11-5-4-2-2-1	(.016)	9-7-5-3-1-0	(.006)
7-7-5-3-2-0	(.042)	11-5-3-3-3-0	(.007)	9-7-5-2-2-0	(.008)
7-7-5-3-1-1	(.077)	11-5-3-3-2-1	(.022)	9-7-5-2-1-1	(.017)
7-7-5-2-2-1	(.116)	11-5-3-2-2-2	(.032)	9-7-4-4-1-0	(.007)
7-7-4-4-2-0	(.051)	11-4-4-4-2-0	(.007)	9-7-4-3-2-0	(.014)
7-7-4-4-1-1	(.093)	11-4-4-4-1-1	(.013)	9-7-4-3-1-1	(.027)
7-7-4-3-3-0	(.060)	11-4-4-3-3-0	(.009)	9-7-4-2-2-1	(.039)
7-7-4-3-2-1	(.168)	11-4-4-3-2-1	(.026)	9-7-3-3-3-0	(.018)
7-7-3-3-3-1	(.198)	11-4-4-2-2-2	(.037)	9-7-3-3-2-1	(.050)
7-6-6-4-1-0	(.026)	11-4-3-3-3-1	(.034)	9-7-3-2-2-2	(.074)
7-6-6-3-2-0	(.048)	11-4-3-3-2-2	(.048)	9-6-6-3-1-0	(.006)
7-6-6-3-1-1	(.009)	11-3-3-3-3-2	(.065)	9-6-6-2-2-0	(.010)
7-6-6-2-2-1	(.127)	10-8-2-2-2-1	(.006)	9-6-6-2-1-1	(.020)
7-6-5-5-1-0	(.029)	10-7-4-2-1-1	(.008)	9-6-5-4-1-0	(.010)

9-6-5-3-2-0	(.020)
9-6-5-3-1-1	(.037)
9-6-5-2-2-1	(.059)
9-6-4-4-2-0	(.024)
9-6-4-4-1-1	(.044)
9-6-4-3-3-0	(.033)
9-6-4-3-2-1	(.088)
9-6-4-2-2-2	(.125)
9-6-3-3-3-1	(.112)
9-6-3-3-2-2	(.153)
9-5-5-5-1-0	(.012)
9-5-5-4-2-0	(.030)
9-5-5-4-1-1	(.059)
9-5-5-3-3-0	(.037)
9-5-5-3-2-1	(.104)
9-5-5-2-2-2	(.142)
9-5-4-4-3-0	(.044)
9-5-4-4-2-1	(.125)
9-5-4-3-3-1	(.153)
9-4-4-4-4-0	(.060)
9-4-4-4-3-1	(.176)
8-8-6-1-1-1	(.006)
8-8-5-3-1-0	(.006)
8-8-5-2-2-0	(.009)
8-8-5-2-1-1	(.018)
8-8-4-4-1-0	(.007)
8-8-4-3-2-0	(.015)
8-8-4-3-1-1	(.031)
8-8-4-2-2-1	(.042)
8-8-3-3-3-0	(.021)
8-8-3-3-2-1	(.061)
8-8-3-2-2-2	(.081)
8-7-7-1-1-1	(.007)
8-7-6-3-1-0	(.008)
8-7-6-2-2-0	(.013)
8-7-6-2-1-1	(.026)
8-7-5-4-1-0	(.013)
8-7-5-3-2-0	(.026)
8-7-5-3-1-1	(.047)
8-7-5-2-2-1	(.070)
8-7-4-4-2-0	(.031)
8-7-4-4-1-1	(.061)
8-7-4-3-3-0	(.039)
8-7-4-3-2-1	(.111)
8-7-4-2-2-2	(.144)
8-7-3-3-3-1	(.129)
8-7-3-3-2-2	(.185)
8-6-6-4-1-0	(.015)
8-6-6-3-2-0	(.030)
8-6-6-3-1-1	(.059)
8-6-6-2-2-1	(.081)
8-6-5-5-1-0	(.017)
8-6-5-4-2-0	(.042)
8-6-5-4-1-1	(.081)
8-6-5-3-3-0	(.059)
8-6-5-3-2-1	(.142)
8-6-5-2-2-2	(.194)
8-6-4-4-3-0	(.068)
8-6-4-4-2-1	(.167)
8-5-5-5-2-0	(.047)
8-5-5-5-1-1	(.091)
8-5-5-4-3-0	(.081)
8-5-5-4-2-1	(.194)
8-5-4-4-4-0	(.092)
7-7-7-3-1-0	(.009)
7-7-7-2-2-0	(.014)
7-7-7-2-1-1	(.027)
7-7-6-4-1-0	(.017)
7-7-6-3-2-0	(.033)
7-7-6-3-1-1	(.063)
7-7-6-2-2-1	(.090)
7-7-5-5-1-0	(.021)
7-7-5-4-2-0	(.047)
7-7-5-4-1-1	(.090)
7-7-5-3-3-0	(.063)
7-7-5-3-2-1	(.159)
7-7-4-4-3-0	(.074)
7-7-4-4-2-1	(.185)
7-6-6-5-1-0	(.023)
7-6-6-4-2-0	(.059)
7-6-6-4-1-1	(.104)
7-6-6-3-3-0	(.071)
7-6-6-3-2-1	(.173)
7-6-5-5-2-0	(.065)
7-6-5-5-1-1	(.117)
7-6-5-4-3-0	(.104)
7-6-4-4-4-0	(.125)
7-5-5-5-3-0	(.117)
7-5-5-4-4-0	(.142)
6-6-6-6-1-0	(.026)
6-6-6-5-2-0	(.072)
6-6-6-5-1-1	(.128)
6-6-6-4-3-0	(.113)
6-6-5-5-3-0	(.128)
6-6-5-4-4-0	(.161)
6-5-5-5-4-0	(.178)
8-6-4-3-3-1	(.202)
9-5-4-3-2-2	(.205)

N = 26

13-3-3-3-2-2	(.006)
12-6-2-2-2-2	(.006)
12-5-4-2-2-1	(.006)
12-5-3-3-2-1	(.009)
12-5-3-2-2-2	(.013)
12-4-4-4-1-1	(.005)
12-4-4-3-2-1	(.011)
12-4-4-2-2-2	(.016)
12-4-3-3-3-1	(.015)
12-4-3-3-2-2	(.021)
12-3-3-3-3-2	(.029)
11-7-3-3-1-1	(.005)
11-7-3-2-2-1	(.007)
11-7-2-2-2-2	(.011)
11-6-5-2-1-1	(.005)
11-6-4-3-1-1	(.009)
11-6-4-2-2-1	(.013)
11-6-3-3-3-0	(.006)
11-6-3-3-2-1	(.018)
11-6-3-2-2-2	(.026)
11-5-5-3-2-0	(.005)
11-5-5-3-1-1	(.011)
11-5-5-2-2-1	(.016)
11-5-4-4-2-0	(.006)
11-5-4-4-1-1	(.013)
11-5-4-3-3-0	(.009)
11-5-4-3-2-1	(.026)
11-5-4-2-2-2	(.035)
11-5-3-3-3-1	(.033)
11-5-3-3-2-2	(.051)
11-4-4-4-3-0	(.011)
11-4-4-4-2-1	(.032)
11-4-4-3-3-1	(.042)
11-4-4-3-2-2	(.059)
11-4-3-3-3-2	(.077)
11-3-3-3-3-3	(.096)
10-8-4-2-1-1	(.005)
10-8-3-3-1-1	(.007)
10-8-3-2-2-1	(.011)
10-8-2-2-2-2	(.015)
10-7-5-2-1-1	(.008)
10-7-4-3-2-0	(.007)
10-7-4-3-1-1	(.014)
10-7-4-2-2-1	(.021)
10-7-3-3-3-0	(.009)
10-7-3-3-2-1	(.027)
10-7-3-2-2-2	(.040)
10-6-6-2-2-0	(.005)

10-6-6-2-1-1	(.010)	9-7-3-3-2-2	(.109)	8-7-4-4-3-0	(.050)
10-6-5-4-1-0	(.005)	9-6-6-4-1-0	(.008)	8-7-4-4-2-1	(.128)
10-6-5-3-2-0	(.010)	9-6-6-3-2-0	(.016)	8-7-4-3-3-1	(.151)
10-6-5-3-1-1	(.019)	9-6-6-3-1-1	(.032)	8-6-6-5-1-0	(.015)
10-6-5-2-2-1	(.029)	9-6-6-2-2-1	(.048)	8-6-6-4-2-0	(.034)
10-6-4-4-2-0	(.012)	9-6-5-5-1-0	(.010)	8-6-6-4-1-1	(.069)
10-6-4-4-1-1	(.024)	9-6-5-4-2-0	(.024)	8-6-6-3-3-0	(.048)
10-6-4-3-3-0	(.016)	9-6-5-4-1-1	(.048)	8-6-6-3-2-1	(.123)
10-6-4-3-2-1	(.048)	9-6-5-3-3-0	(.032)	8-6-6-2-2-2	(.162)
10-6-4-2-2-2	(.069)	9-6-5-3-2-1	(.088)	8-6-5-5-2-0	(.041)
10-6-3-3-3-1	(.058)	9-6-5-2-2-2	(.123)	8-6-5-5-1-1	(.076)
10-6-3-3-2-2	(.088)	9-6-4-4-3-0	(.036)	8-6-5-4-3-0	(.069)
10-5-5-5-1-0	(.006)	9-6-4-4-2-1	(.100)	8-6-5-4-2-1	(.162)
10-5-5-4-2-0	(.015)	9-6-4-3-3-1	(.132)	8-6-5-3-3-1	(.202)
10-5-5-4-1-1	(.029)	9-6-4-3-2-2	(.176)	8-6-4-4-4-0	(.077)
10-5-5-3-3-0	(.019)	9-5-5-5-2-0	(.029)	8-5-5-5-3-0	(.076)
10-5-5-3-2-1	(.054)	9-5-5-5-1-1	(.054)	8-5-5-5-2-1	(.185)
10-5-5-2-2-2	(.076)	9-5-5-4-3-0	(.048)	8-5-5-4-4-0	(.092)
10-5-4-4-3-0	(.024)	9-5-5-4-2-1	(.123)	7-7-7-4-1-0	(.012)
10-5-4-4-2-1	(.069)	9-5-5-3-3-1	(.143)	7-7-7-3-2-0	(.022)
10-5-4-3-3-1	(.088)	9-5-5-3-2-2	(.202)	7-7-7-3-1-1	(.042)
10-5-4-3-2-2	(.123)	9-5-4-4-4-0	(.055)	7-7-7-2-2-1	(.063)
10-5-3-3-3-2	(.143)	9-5-4-4-3-1	(.176)	7-7-6-5-1-0	(.017)
10-4-4-4-4-0	(.029)	9-4-4-4-4-1	(.203)	7-7-6-4-2-0	(.040)
10-4-4-4-3-1	(.100)	8-8-6-3-1-0	(.005)	7-7-6-4-1-1	(.074)
10-4-4-4-2-2	(.138)	8-8-6-2-2-0	(.008)	7-7-6-3-3-0	(.051)
10-4-4-3-3-2	(.176)	8-8-6-2-1-1	(.015)	7-7-6-3-2-1	(.135)
9-9-4-2-1-1	(.006)	8-8-5-4-1-0	(.008)	7-7-6-2-2-2	(.183)
9-9-3-3-1-1	(.007)	8-8-5-3-2-0	(.015)	7-7-5-5-2-0	(.048)
9-9-3-2-2-1	(.012)	8-8-5-3-1-1	(.031)	7-7-5-5-1-1	(.089)
9-9-2-2-2-2	(.018)	8-8-5-2-2-1	(.042)	7-7-5-4-3-0	(.074)
9-8-5-2-2-0	(.005)	8-8-4-4-2-0	(.019)	7-7-5-4-2-1	(.183)
9-8-5-2-1-1	(.011)	8-8-4-4-1-1	(.035)	7-7-4-4-4-0	(.090)
9-8-4-3-2-0	(.008)	8-8-4-3-3-0	(.025)	7-6-6-6-1-0	(.019)
9-8-4-3-1-1	(.018)	8-8-4-3-2-1	(.071)	7-6-6-5-2-0	(.054)
9-8-4-2-2-1	(.025)	8-8-4-2-2-2	(.096)	7-6-6-5-1-1	(.096)
9-8-3-3-3-0	(.012)	8-8-3-3-3-1	(.090)	7-6-6-4-3-0	(.088)
9-8-3-3-2-1	(.033)	8-8-3-3-2-2	(.128)	7-6-6-4-2-1	(.202)
9-8-3-2-2-2	(.050)	8-7-7-3-1-0	(.006)	7-6-5-5-3-0	(.096)
9-7-6-2-2-0	(.007)	8-7-7-2-2-0	(.009)	7-6-5-4-4-0	(.123)
9-7-6-2-1-1	(.014)	8-7-7-2-1-1	(.018)	7-5-5-5-4-0	(.138)
9-7-5-4-1-0	(.007)	8-7-6-4-1-0	(.011)	6-6-6-6-2-0	(.059)
9-7-5-3-2-0	(.014)	8-7-6-3-2-0	(.021)	6-6-6-6-1-1	(.107)
9-7-5-3-1-1	(.027)	8-7-6-3-1-1	(.040)	6-6-6-5-3-0	(.107)
9-7-5-2-2-1	(.040)	8-7-6-2-2-1	(.058)	6-6-6-4-4-0	(.136)
9-7-4-4-2-0	(.018)	8-7-5-5-1-0	(.012)	6-6-5-5-4-0	(.146)
9-7-4-4-1-1	(.033)	8-7-5-4-2-0	(.031)	6-5-5-5-5-0	(.176)
9-7-4-3-3-0	(.022)	8-7-5-4-1-1	(.058)		
9-7-4-3-2-1	(.062)	8-7-5-3-3-0	(.040)		
9-7-4-2-2-2	(.090)	8-7-5-3-2-1	(.106)		
9-7-3-3-3-1	(.078)	8-7-5-2-2-2	(.140)		

N = 27

13-5-3-2-2-2	(.005)	11-4-4-4-4-0	(.014)	9-9-4-3-2-0	(.005)
13-4-4-2-2-2	(.006)	11-4-4-4-3-1	(.052)	9-9-4-3-1-1	(.010)
13-4-3-3-3-1	(.006)	11-4-4-4-2-2	(.073)	9-9-4-2-2-1	(.015)
13-4-3-3-2-2	(.008)	11-4-4-3-3-2	(.093)	9-9-3-3-3-0	(.006)
13-3-3-3-3-2	(.011)	11-4-3-3-3-3	(.116)	9-9-3-3-2-1	(.018)
12-7-2-2-2-2	(.005)	10-9-3-2-2-1	(.006)	9-9-3-2-2-2	(.028)
12-6-4-2-2-1	(.006)	10-9-2-2-2-2	(.009)	9-8-6-2-1-1	(.009)
12-6-3-3-2-1	(.008)	10-8-5-2-1-1	(.005)	9-8-5-3-2-0	(.009)
12-6-3-2-2-2	(.011)	10-8-4-3-1-1	(.009)	9-8-5-3-1-1	(.018)
12-5-5-3-1-1	(.005)	10-8-4-2-2-1	(.014)	9-8-5-2-2-1	(.027)
12-5-5-2-2-1	(.007)	10-8-3-3-3-0	(.006)	9-8-4-4-2-0	(.010)
12-5-4-4-1-1	(.006)	10-8-3-3-2-1	(.018)	9-8-4-4-1-1	(.020)
12-5-4-3-2-1	(.011)	10-8-3-2-2-2	(.027)	9-8-4-3-3-0	(.015)
12-5-4-2-2-2	(.016)	10-7-6-2-1-1	(.007)	9-8-4-3-2-1	(.042)
12-5-3-3-3-1	(.015)	10-7-5-3-2-0	(.007)	9-8-4-2-2-2	(.057)
12-5-3-3-2-2	(.022)	10-7-5-3-1-1	(.015)	9-8-3-3-3-1	(.052)
12-4-4-4-3-0	(.005)	10-7-5-2-2-1	(.020)	9-8-3-3-2-2	(.078)
12-4-4-4-2-1	(.014)	10-7-4-4-2-0	(.009)	9-7-7-2-2-0	(.005)
12-4-4-3-3-1	(.018)	10-7-4-4-1-1	(.018)	9-7-7-2-1-1	(.010)
12-4-4-3-2-2	(.028)	10-7-4-3-3-0	(.012)	9-7-6-4-1-0	(.006)
12-4-3-3-3-2	(.036)	10-7-4-3-2-1	(.035)	9-7-6-3-2-0	(.012)
12-3-3-3-3-3	(.047)	10-7-4-2-2-2	(.051)	9-7-6-3-1-1	(.022)
11-8-3-2-2-1	(.005)	10-7-3-3-3-1	(.044)	9-7-6-2-2-1	(.035)
11-8-2-2-2-2	(.007)	10-7-3-3-2-2	(.064)	9-7-5-5-1-0	(.007)
11-7-4-3-1-1	(.006)	10-6-6-3-2-0	(.008)	9-7-5-4-2-0	(.018)
11-6-6-2-1-1	(.005)	10-6-6-3-1-1	(.016)	9-7-5-4-1-1	(.035)
11-7-4-2-2-1	(.010)	10-6-6-2-2-1	(.024)	9-7-5-3-3-0	(.022)
11-7-3-3-2-1	(.013)	10-6-5-5-1-0	(.005)	9-7-5-3-2-1	(.064)
11-7-3-2-2-2	(.018)	10-6-5-4-2-0	(.013)	9-7-5-2-2-2	(.091)
11-6-5-3-2-0	(.005)	10-6-5-4-1-1	(.024)	9-7-4-4-3-0	(.028)
11-6-5-3-1-1	(.009)	10-6-5-3-3-0	(.016)	9-7-4-4-2-1	(.078)
11-6-5-2-2-1	(.014)	10-6-5-3-2-1	(.047)	9-7-4-3-3-1	(.095)
11-6-4-4-2-0	(.006)	10-6-5-2-2-2	(.068)	9-7-4-3-2-2	(.133)
11-6-4-4-1-1	(.011)	10-6-4-4-3-0	(.020)	9-7-3-3-3-2	(.161)
11-6-4-3-3-0	(.008)	10-6-4-4-2-1	(.056)	9-6-6-5-1-0	(.008)
11-6-4-3-2-1	(.022)	10-6-4-3-3-1	(.073)	9-6-6-4-2-0	(.020)
11-6-4-2-2-2	(.031)	10-6-4-3-2-2	(.109)	9-6-6-4-1-1	(.039)
11-6-3-3-3-1	(.029)	10-6-3-3-3-2	(.128)	9-6-6-3-3-0	(.027)
11-6-3-3-2-2	(.043)	10-5-5-5-2-0	(.015)	9-6-6-3-2-1	(.073)
11-5-5-4-2-0	(.007)	10-5-5-5-1-1	(.029)	9-6-6-2-2-2	(.109)
11-5-5-4-1-1	(.014)	10-5-5-4-3-0	(.024)	9-6-5-5-2-0	(.024)
11-5-5-3-3-0	(.009)	10-5-5-4-2-1	(.068)	9-6-5-5-1-1	(.047)
11-5-5-3-2-1	(.027)	10-5-5-3-3-1	(.084)	9-6-5-4-3-0	(.039)
11-5-5-2-2-2	(.037)	10-5-5-3-2-2	(.115)	9-6-5-4-2-1	(.109)
11-5-4-4-3-0	(.011)	10-5-4-4-4-0	(.029)	9-6-5-3-3-1	(.128)
11-5-4-4-2-1	(.031)	10-5-4-4-3-1	(.109)	9-6-5-3-2-2	(.179)
11-5-4-3-3-1	(.043)	10-5-4-4-2-2	(.139)	9-6-4-4-4-0	(.048)
11-5-4-3-2-2	(.059)	10-5-4-3-3-2	(.179)	9-6-4-4-3-1	(.146)
11-5-3-3-3-2	(.078)	10-4-4-4-4-1	(.116)	9-6-4-4-2-2	(.204)
		10-4-4-4-3-2	(.204)	9-5-5-5-3-0	(.047)
		9-9-5-2-1-1	(.006)	9-5-5-5-2-1	(.115)

9-5-5-4-4-0 (.056)
9-5-5-4-3-1 (.179)
9-5-4-4-4-1 (.204)
8-8-7-2-2-0 (.006)
8-8-7-2-1-1 (.011)
8-8-6-4-1-0 (.006)
8-8-6-3-2-0 (.014)
8-8-6-3-1-1 (.027)
8-8-6-2-2-1 (.037)
8-8-5-5-1-0 (.008)
8-8-5-4-2-0 (.019)
8-8-5-4-1-1 (.037)
8-8-5-3-3-0 (.027)
8-8-5-3-2-1 (.070)
8-8-5-2-2-2 (.096)
8-8-4-4-3-0 (.030)
8-8-4-4-2-1 (.085)
8-8-4-3-3-1 (.110)
8-8-4-3-2-2 (.141)
8-8-3-3-3-2 (.188)
8-7-7-4-1-0 (.008)
8-7-7-3-2-0 (.016)
8-7-7-3-1-1 (.029)
8-7-7-2-2-1 (.044)
8-7-6-5-1-0 (.010)
8-7-6-4-2-0 (.027)
8-7-6-4-1-1 (.051)
8-7-6-3-3-0 (.035)
8-7-6-3-2-1 (.091)
8-7-6-2-2-2 (.124)
8-7-5-5-2-0 (.030)
8-7-5-5-1-1 (.056)
8-7-5-4-3-0 (.051)
8-7-5-4-2-1 (.124)
8-7-5-3-3-1 (.155)
8-7-4-4-4-0 (.057)
8-7-4-4-3-1 (.188)
8-6-6-6-1-0 (.013)
8-6-6-5-2-0 (.036)
8-6-6-5-1-1 (.068)
8-6-6-4-3-0 (.056)
8-6-6-4-2-1 (.139)
8-6-6-3-3-1 (.179)
8-6-5-5-3-0 (.068)
8-6-5-5-2-1 (.160)
8-6-5-4-4-0 (.080)
8-5-5-5-4-0 (.092)
7-7-7-5-1-0 (.012)
7-7-7-4-2-0 (.029)
7-7-7-4-1-1 (.052)
7-7-7-3-3-0 (.037)
7-7-7-3-2-1 (.097)
7-7-7-2-2-2 (.133)
7-7-6-6-1-0 (.015)
7-7-6-5-2-0 (.040)
7-7-6-5-1-1 (.075)
7-7-6-4-3-0 (.064)
7-7-6-4-2-1 (.155)
7-7-6-3-3-1 (.191)
7-7-5-5-3-0 (.075)
7-7-5-5-2-1 (.182)
7-7-5-4-4-0 (.091)
7-6-6-6-2-0 (.047)
7-6-6-6-1-1 (.084)
7-6-6-5-3-0 (.084)
7-6-6-5-2-1 (.197)
7-6-6-4-4-0 (.109)
7-6-5-5-4-0 (.115)
7-5-5-5-5-0 (.133)
6-6-6-6-3-0 (.093)
6-6-6-5-4-0 (.129)
6-6-5-5-5-0 (.146)

N = 28

13-5-4-2-2-2 (.007)
13-5-3-3-3-1 (.006)
13-5-3-3-2-2 (.009)
13-4-4-4-2-1 (.006)
13-4-4-3-3-1 (.007)
13-4-4-3-2-2 (.011)
13-4-3-3-3-2 (.014)
13-3-3-3-3-3 (.020)
12-7-3-3-2-1 (.006)
12-7-3-2-2-2 (.009)
12-6-5-2-2-1 (.006)
12-6-4-4-1-1 (.005)
12-6-4-3-2-1 (.010)
12-6-4-2-2-2 (.014)
12-6-3-3-3-1 (.013)
12-6-3-3-2-2 (.019)
12-5-5-4-1-1 (.006)
12-5-5-3-2-1 (.012)
12-5-5-2-2-2 (.017)
12-5-4-4-3-0 (.005)
12-5-4-4-2-1 (.014)
12-5-4-3-3-1 (.019)
12-5-4-3-2-2 (.028)
12-5-3-3-3-2 (.038)
12-4-4-4-4-0 (.006)
12-4-4-4-3-1 (.025)
12-4-4-4-2-2 (.034)
12-4-4-3-3-2 (.046)
12-4-3-3-3-3 (.061)
11-8-4-2-2-1 (.007)
11-8-3-3-2-1 (.009)
11-8-3-2-2-2 (.013)
11-7-5-3-1-1 (.007)
11-7-5-2-2-1 (.010)
11-7-4-4-1-1 (.009)
11-7-4-3-3-0 (.006)
11-7-4-3-2-1 (.017)
11-7-4-2-2-2 (.025)
11-7-3-3-3-1 (.022)
11-7-3-3-2-2 (.031)
11-6-6-3-1-1 (.008)
11-6-6-2-2-1 (.012)
11-6-5-4-2-0 (.006)
11-6-5-4-1-1 (.012)
11-6-5-3-3-0 (.008)
11-6-5-3-2-1 (.024)
11-6-5-2-2-2 (.034)
11-6-4-4-3-0 (.010)
11-6-4-4-2-1 (.028)
11-6-4-3-3-1 (.038)
11-6-4-3-2-2 (.053)
11-6-3-3-3-2 (.069)
11-5-5-5-2-0 (.007)
11-5-5-5-1-1 (.014)
11-5-5-4-3-0 (.012)
11-5-5-4-2-1 (.034)
11-5-5-3-3-1 (.045)
11-5-5-3-2-2 (.065)
11-5-4-4-4-0 (.014)
11-5-4-4-3-1 (.053)
11-5-4-4-2-2 (.074)
11-5-4-3-3-2 (.094)
11-5-3-3-3-3 (.121)
11-4-4-4-4-1 (.065)
11-4-4-4-3-2 (.115)
11-4-4-3-3-3 (.142)
10-10-2-2-2-2 (.005)
10-9-4-3-1-1 (.005)
10-9-4-2-2-1 (.008)
10-9-3-3-2-1 (.011)
10-9-3-2-2-2 (.016)
10-8-6-2-1-1 (.005)
10-8-5-3-2-0 (.005)
10-8-5-3-1-1 (.010)

10-8-5-2-2-1	(.014)	9-9-4-3-3-0	(.009)	9-5-5-5-4-0	(.061)
10-8-4-4-2-0	(.006)	9-9-4-3-2-1	(.025)	9-5-5-5-3-1	(.170)
10-8-4-4-1-1	(.012)	9-9-4-2-2-2	(.037)	8-8-8-2-1-1	(.007)
10-8-4-3-3-0	(.008)	9-9-3-3-3-1	(.032)	8-8-7-4-1-0	(.005)
10-8-4-3-2-1	(.024)	9-9-3-3-2-2	(.046)	8-8-7-3-2-0	(.010)
10-8-4-2-2-2	(.033)	9-8-7-2-1-1	(.007)	8-8-7-3-1-1	(.020)
10-8-3-3-3-1	(.030)	9-8-6-3-2-0	(.008)	8-8-7-2-2-1	(.029)
10-8-3-3-2-2	(.045)	9-8-6-3-1-1	(.016)	8-8-6-5-1-0	(.007)
10-7-7-2-1-1	(.005)	9-8-6-2-2-1	(.024)	8-8-6-4-2-0	(.017)
10-7-6-3-2-0	(.007)	9-8-5-5-1-0	(.005)	8-8-6-4-1-1	(.033)
10-7-6-3-1-1	(.013)	9-8-5-4-2-0	(.012)	8-8-6-3-3-0	(.024)
10-7-6-2-2-1	(.018)	9-8-5-4-1-1	(.024)	8-8-6-3-2-1	(.064)
10-7-5-4-2-0	(.010)	9-8-5-3-3-0	(.016)	8-8-6-2-2-2	(.085)
10-7-5-4-1-1	(.018)	9-8-5-3-2-1	(.045)	8-8-5-5-2-0	(.020)
10-7-5-3-3-0	(.013)	9-8-5-2-2-2	(.064)	8-8-5-5-1-1	(.038)
10-7-5-3-2-1	(.036)	9-8-4-4-3-0	(.018)	8-8-5-4-3-0	(.033)
10-7-5-2-2-2	(.050)	9-8-4-4-2-1	(.051)	8-8-5-4-2-1	(.085)
10-7-4-4-3-0	(.016)	9-8-4-3-3-1	(.068)	8-8-5-3-3-1	(.113)
10-7-4-4-2-1	(.045)	9-8-4-3-2-2	(.092)	8-8-5-3-2-2	(.144)
10-7-4-3-3-1	(.056)	9-8-3-3-3-2	(.119)	8-8-4-4-4-0	(.040)
10-7-4-3-2-2	(.081)	9-7-7-3-2-0	(.009)	8-8-4-4-3-1	(.129)
10-7-3-3-3-2	(.097)	9-7-7-3-1-1	(.017)	8-8-4-4-2-2	(.171)
10-6-6-4-2-0	(.011)	9-7-7-2-2-1	(.026)	8-7-7-5-1-0	(.008)
10-6-6-4-1-1	(.021)	9-7-6-5-1-0	(.007)	8-7-7-4-2-0	(.020)
10-6-6-3-3-0	(.014)	9-7-6-4-2-0	(.016)	8-7-7-4-1-1	(.038)
10-6-6-3-2-1	(.040)	9-7-6-4-1-1	(.030)	8-7-7-3-3-0	(.026)
10-6-6-2-2-2	(.061)	9-7-6-3-3-0	(.020)	8-7-7-3-2-1	(.070)
10-6-5-5-2-0	(.013)	9-7-6-3-2-1	(.056)	8-7-7-2-2-2	(.094)
10-6-5-5-1-1	(.026)	9-7-6-2-2-2	(.081)	8-7-6-6-1-0	(.010)
10-6-5-4-3-0	(.021)	9-7-5-5-2-0	(.018)	8-7-6-5-2-0	(.027)
10-6-5-4-2-1	(.061)	9-7-5-5-1-1	(.036)	8-7-6-5-1-1	(.050)
10-6-5-3-3-1	(.073)	9-7-5-4-3-0	(.030)	8-7-6-4-3-0	(.045)
10-6-5-3-2-2	(.107)	9-7-5-4-2-1	(.081)	8-7-6-4-2-1	(.113)
10-6-4-4-4-0	(.026)	9-7-5-3-3-1	(.097)	8-7-6-3-3-1	(.136)
10-6-4-4-3-1	(.088)	9-7-5-3-2-2	(.136)	8-7-6-3-2-2	(.188)
10-6-4-4-2-2	(.124)	9-7-4-4-4-0	(.037)	8-7-5-5-3-0	(.050)
10-6-4-3-3-2	(.158)	9-7-4-4-3-1	(.119)	8-7-5-5-2-1	(.127)
10-6-3-3-3-3	(.189)	9-7-4-4-2-2	(.165)	8-7-5-4-4-0	(.064)
10-5-5-5-3-0	(.026)	9-7-4-3-3-2	(.194)	8-7-5-4-3-1	(.188)
10-5-5-5-2-1	(.068)	9-6-6-6-1-0	(.007)	8-6-6-6-2-0	(.031)
10-5-5-4-4-0	(.031)	9-6-6-5-2-0	(.021)	8-6-6-6-1-1	(.061)
10-5-5-4-3-1	(.107)	9-6-6-5-1-1	(.040)	8-6-6-5-3-0	(.061)
10-5-5-4-2-2	(.141)	9-6-6-4-3-0	(.034)	8-6-6-5-2-1	(.141)
10-5-5-3-3-2	(.170)	9-6-6-4-2-1	(.088)	8-6-6-4-4-0	(.071)
10-5-4-4-4-1	(.124)	9-6-6-3-3-1	(.115)	8-6-5-5-4-0	(.082)
9-9-6-2-1-1	(.005)	9-6-6-3-2-2	(.158)	8-5-5-5-5-0	(.092)
9-9-5-3-2-0	(.005)	9-6-5-5-3-0	(.040)	7-7-7-6-1-0	(.011)
9-9-5-3-1-1	(.011)	9-6-5-5-2-1	(.107)	7-7-7-5-2-0	(.031)
9-9-5-2-2-1	(.016)	9-6-5-4-4-0	(.047)	7-7-7-5-1-1	(.057)
9-9-4-4-2-0	(.007)	9-6-5-4-3-1	(.158)	7-7-7-4-3-0	(.046)
9-9-4-4-1-1	(.013)	9-6-4-4-4-1	(.173)	7-7-7-4-2-1	(.122)

7-7-7-3-3-1	(.145)	12-5-5-3-2-2	(.031)	11-5-5-3-3-2	(.103)
7-7-7-3-2-2	(.195)	12-5-4-4-4-0	(.007)	11-5-4-4-4-1	(.067)
7-7-6-6-2-0	(.036)	12-5-4-4-3-1	(.026)	11-5-4-4-3-2	(.116)
7-7-6-6-1-1	(.067)	12-5-4-4-2-2	(.037)	11-5-4-3-3-3	(.150)
7-7-6-5-3-0	(.067)	12-5-4-3-3-2	(.049)	11-4-4-4-4-2	(.142)
7-7-6-5-2-1	(.162)	12-5-3-3-3-3	(.063)	11-4-4-4-3-3	(.173)
7-7-6-4-4-0	(.081)	12-4-4-4-4-1	(.031)	10-10-3-3-2-1	(.006)
7-7-5-5-4-0	(.090)	12-4-4-4-3-2	(.060)	10-10-3-2-2-2	(.009)
7-6-6-6-3-0	(.073)	12-4-4-3-3-3	(.075)	10-9-5-3-1-1	(.006)
7-6-6-6-2-1	(.170)	11-9-3-3-2-1	(.005)	10-9-5-2-2-1	(.009)
7-6-6-5-4-0	(.107)	11-9-3-2-2-2	(.008)	10-9-4-4-1-1	(.007)
7-6-5-5-5-0	(.120)	11-8-5-3-1-1	(.005)	10-9-4-3-3-0	(.005)
6-6-6-6-4-0	(.116)	11-8-5-2-2-1	(.007)	10-9-4-3-2-1	(.015)
6-6-6-5-5-0	(.129)	11-8-4-4-1-1	(.006)	10-9-4-2-2-2	(.021)
		11-8-4-3-2-1	(.012)	10-9-3-3-3-1	(.019)
N = 29		11-8-4-2-2-2	(.017)	10-9-3-3-2-2	(.028)
		11-8-3-3-3-1	(.015)	10-8-6-3-1-1	(.009)
14-4-3-3-3-2	(.006)	11-8-3-3-2-2	(.022)	10-8-6-2-2-1	(.013)
14-3-3-3-3-3	(.008)	11-7-6-3-1-1	(.006)	10-8-5-4-2-0	(.007)
13-6-4-2-2-2	(.007)	11-7-6-2-2-1	(.009)	10-8-5-4-1-1	(.013)
13-6-3-3-3-1	(.006)	11-7-5-4-2-0	(.005)	10-8-5-3-3-0	(.009)
13-6-3-3-2-2	(.008)	11-7-5-4-1-1	(.009)	10-8-5-3-2-1	(.025)
13-5-5-3-2-1	(.005)	11-7-5-3-3-0	(.006)	10-8-5-2-2-2	(.035)
13-5-5-2-2-2	(.007)	11-7-5-3-2-1	(.018)	10-8-4-4-3-0	(.010)
13-5-4-4-2-1	(.007)	11-7-5-2-2-2	(.026)	10-8-4-4-2-1	(.030)
13-5-4-3-3-1	(.008)	11-7-4-4-3-0	(.008)	10-8-4-3-3-1	(.040)
13-5-4-3-2-2	(.012)	11-7-4-4-2-1	(.022)	10-8-4-3-2-2	(.057)
13-5-3-3-3-2	(.016)	11-7-4-3-3-1	(.029)	10-8-3-3-3-2	(.073)
13-4-4-4-3-1	(.010)	11-7-4-3-2-2	(.041)	10-7-7-3-2-0	(.005)
13-4-4-4-2-2	(.015)	11-7-3-3-3-2	(.053)	10-7-7-3-1-1	(.009)
13-4-4-3-3-2	(.020)	11-6-6-4-2-0	(.006)	10-7-7-2-2-1	(.015)
13-4-3-3-3-3	(.026)	11-6-6-4-1-1	(.011)	10-7-6-4-2-0	(.009)
12-8-3-2-2-2	(.006)	11-6-6-3-3-0	(.007)	10-7-6-4-1-1	(.017)
12-7-5-2-2-1	(.005)	11-6-6-3-2-1	(.021)	10-7-6-3-3-0	(.011)
12-7-4-3-2-1	(.008)	11-6-6-2-2-2	(.031)	10-7-6-3-2-1	(.033)
12-7-4-2-2-2	(.012)	11-6-5-5-2-0	(.007)	10-7-6-2-2-2	(.047)
12-7-3-3-3-1	(.010)	11-6-5-5-1-1	(.013)	10-7-5-5-2-0	(.009)
12-7-3-3-2-2	(.015)	11-6-5-4-3-0	(.011)	10-7-5-5-1-1	(.019)
12-6-6-2-2-1	(.006)	11-6-5-4-2-1	(.031)	10-7-5-4-3-0	(.017)
12-6-5-4-1-1	(.006)	11-6-5-3-3-1	(.040)	10-7-5-4-2-1	(.047)
12-6-5-3-2-1	(.011)	11-6-5-3-2-2	(.059)	10-7-5-3-3-1	(.061)
12-6-5-2-2-2	(.016)	11-6-4-4-4-0	(.013)	10-7-5-3-2-2	(.082)
12-6-4-4-2-1	(.013)	11-6-4-4-3-1	(.049)	10-7-4-4-4-0	(.021)
12-6-4-3-3-1	(.017)	11-6-4-4-2-2	(.067)	10-7-4-4-3-1	(.073)
12-6-4-3-2-2	(.026)	11-6-4-3-3-2	(.086)	10-7-4-4-2-2	(.102)
12-6-3-3-3-2	(.034)	11-6-3-3-3-3	(.105)	10-7-4-3-3-2	(.127)
12-5-5-5-1-1	(.007)	11-5-5-5-3-0	(.013)	10-7-3-3-3-3	(.152)
12-5-5-4-3-0	(.006)	11-5-5-5-2-1	(.036)	10-6-6-5-2-0	(.012)
12-5-5-4-2-1	(.016)	11-5-5-4-4-0	(.016)	10-6-6-5-1-1	(.023)
12-5-5-3-3-1	(.021)	11-5-5-4-3-1	(.059)	10-6-6-4-3-0	(.019)
		11-5-5-4-2-2	(.077)	10-6-6-4-2-1	(.053)

10-6-6-3-3-1	(.066)	9-7-7-2-2-2	(.064)	8-7-7-4-3-0	(.035)
10-6-6-3-2-2	(.098)	9-7-6-6-1-0	(.006)	8-7-7-4-2-1	(.088)
10-6-5-5-3-0	(.023)	9-7-6-5-2-0	(.017)	8-7-7-3-3-1	(.107)
10-6-5-5-2-1	(.063)	9-7-6-5-1-1	(.033)	8-7-7-3-2-2	(.151)
10-6-5-4-4-0	(.028)	9-7-6-4-3-0	(.028)	8-7-6-6-2-0	(.025)
10-6-5-4-3-1	(.098)	9-7-6-4-2-1	(.073)	8-7-6-6-1-1	(.047)
10-6-5-4-2-2	(.134)	9-7-6-3-3-1	(.090)	8-7-6-5-3-0	(.047)
10-6-5-3-3-2	(.159)	9-7-6-3-2-2	(.127)	8-7-6-5-2-1	(.112)
10-6-4-4-4-1	(.007)	9-7-5-5-3-0	(.033)	8-7-6-4-4-0	(.057)
10-6-4-4-3-2	(.189)	9-7-5-5-2-1	(.082)	8-7-6-4-3-1	(.172)
10-5-5-5-4-0	(.034)	9-7-5-4-4-0	(.040)	8-7-5-5-4-0	(.065)
10-5-5-5-3-1	(.105)	9-7-5-4-3-1	(.127)	8-7-5-5-3-1	(.194)
10-5-5-5-2-2	(.148)	9-7-5-4-2-2	(.172)	8-6-6-6-3-0	(.053)
10-5-5-4-4-1	(.134)	9-7-5-3-3-2	(.200)	8-6-6-6-2-1	(.134)
9-9-6-3-2-0	(.005)	9-7-4-4-4-1	(.148)	8-6-6-5-4-0	(.074)
9-9-6-3-1-1	(.009)	9-6-6-6-2-0	(.019)	8-6-5-5-5-0	(.084)
9-9-6-2-2-1	(.015)	9-6-6-6-1-1	(.036)	7-7-7-7-1-0	(.008)
9-9-5-4-2-0	(.007)	9-6-6-5-3-0	(.036)	7-7-7-6-2-0	(.028)
9-9-5-4-1-1	(.015)	9-6-6-5-2-1	(.098)	7-7-7-6-1-1	(.050)
9-9-5-3-3-0	(.009)	9-6-6-4-4-0	(.043)	7-7-7-5-3-0	(.050)
9-9-5-3-2-1	(.028)	9-6-6-4-3-1	(.141)	7-7-7-5-2-1	(.128)
9-9-5-2-2-2	(.040)	9-6-6-4-2-2	(.189)	7-7-7-4-4-0	(.064)
9-9-4-4-3-0	(.012)	9-6-5-5-4-0	(.053)	7-7-7-4-3-1	(.177)
9-9-4-4-2-1	(.034)	9-6-5-5-3-1	(.159)	7-7-6-6-3-0	(.061)
9-9-4-3-3-1	(.042)	9-6-5-4-4-1	(.189)	7-7-6-6-2-1	(.143)
9-9-4-3-2-2	(.062)	9-5-5-5-5-0	(.063)	7-7-6-5-4-0	(.082)
9-9-3-3-3-2	(.075)	8-8-8-3-2-0	(.007)	7-7-5-5-5-0	(.098)
9-8-7-3-2-0	(.006)	8-8-8-3-1-1	(.014)	7-6-6-6-4-0	(.098)
9-8-7-3-1-1	(.012)	8-8-8-2-2-1	(.020)	7-6-6-5-5-0	(.105)
9-8-7-2-2-1	(.018)	8-8-7-5-1-0	(.006)	6-6-6-6-5-0	(.116)
9-8-6-4-2-0	(.010)	8-8-7-4-2-0	(.014)		
9-8-6-4-1-1	(.021)	8-8-7-4-1-1	(.026)		
9-8-6-3-3-0	(.015)	8-8-7-3-3-0	(.018)	N = 30	
9-8-6-3-2-1	(.040)	8-8-7-3-2-1	(.050)		
9-8-6-2-2-2	(.057)	8-8-7-2-2-2	(.067)	14-5-4-3-2-2	(.005)
9-8-5-5-2-0	(.013)	8-8-6-6-1-0	(.007)	14-5-3-3-3-2	(.007)
9-8-5-5-1-1	(.025)	8-8-6-5-2-0	(.019)	14-4-4-4-2-2	(.006)
9-8-5-4-3-0	(.021)	8-8-6-5-1-1	(.035)	14-4-4-3-3-2	(.008)
9-8-5-4-2-1	(.057)	8-8-6-4-3-0	(.030)	14-4-3-3-3-3	(.011)
9-8-5-3-3-1	(.073)	8-8-6-4-2-1	(.076)	13-7-4-2-2-2	(.005)
9-8-5-3-2-2	(.102)	8-8-6-3-3-1	(.102)	13-7-3-3-3-1	(.005)
9-8-4-4-4-0	(.025)	8-8-6-3-2-2	(.138)	13-7-3-3-2-2	(.007)
9-8-4-4-3-1	(.084)	8-8-5-5-3-0	(.035)	13-6-5-3-2-1	(.005)
9-8-4-4-2-2	(.114)	8-8-5-5-2-1	(.091)	13-6-5-2-2-2	(.007)
9-8-4-3-3-2	(.148)	8-8-5-4-4-0	(.042)	13-6-4-4-2-1	(.006)
9-8-3-3-3-3	(.173)	8-8-5-4-3-1	(.138)	13-6-4-3-3-1	(.008)
9-7-7-5-1-0	(.005)	8-8-5-4-2-2	(.176)	13-6-4-3-2-2	(.011)
9-7-7-4-2-0	(.012)	8-8-4-4-4-1	(.160)	13-6-3-3-3-2	(.015)
9-7-7-4-1-1	(.023)	8-7-7-6-1-0	(.007)	13-5-5-4-2-1	(.007)
9-7-7-3-3-0	(.015)	8-7-7-5-2-0	(.022)	13-5-5-3-3-1	(.009)
9-7-7-3-2-1	(.043)	8-7-7-5-1-1	(.041)	13-5-5-3-2-2	(.014)

13-5-4-4-3-1	(.014)	11-8-5-2-2-2	(.018)	10-10-3-3-2-2	(.016)
13-5-4-4-2-2	(.017)	11-8-4-4-3-0	(.006)	10-9-6-3-1-1	(.005)
13-5-4-3-3-2	(.022)	11-8-4-4-2-1	(.017)	10-9-6-2-2-1	(.008)
13-5-3-3-3-3	(.029)	11-8-4-3-3-1	(.021)	10-9-5-4-1-1	(.008)
13-4-4-4-4-1	(.014)	11-8-4-3-2-2	(.030)	10-9-5-3-3-0	(.005)
13-4-4-4-3-2	(.027)	11-8-3-3-3-2	(.040)	10-9-5-3-2-1	(.016)
13-4-4-3-3-3	(.036)	11-7-7-3-1-1	(.005)	10-9-5-2-2-2	(.023)
12-8-4-3-2-1	(.006)	11-7-7-2-2-1	(.007)	10-9-4-4-3-0	(.007)
12-8-4-2-2-2	(.008)	11-7-6-4-1-1	(.009)	10-9-4-4-2-1	(.019)
12-8-3-3-3-1	(.007)	11-7-6-3-3-0	(.006)	10-9-4-3-3-1	(.026)
12-8-3-3-2-2	(.011)	11-7-6-3-2-1	(.017)	10-9-4-3-2-2	(.037)
12-7-5-3-2-1	(.009)	11-7-6-2-2-2	(.025)	10-9-3-3-3-2	(.046)
12-7-5-2-2-2	(.013)	11-7-5-5-2-0	(.005)	10-8-7-3-1-1	(.007)
12-7-4-4-2-1	(.011)	11-7-5-5-1-1	(.010)	10-8-7-2-2-1	(.010)
12-7-4-3-3-1	(.014)	11-7-5-4-3-0	(.009)	10-8-6-4-2-0	(.006)
12-7-4-3-2-2	(.021)	11-7-5-4-2-1	(.025)	10-8-6-4-1-1	(.012)
12-7-3-3-3-2	(.027)	11-7-5-3-3-1	(.032)	10-8-6-3-3-0	(.008)
12-6-6-4-1-1	(.005)	11-7-5-3-2-2	(.046)	10-8-6-3-2-1	(.023)
12-6-6-3-2-1	(.010)	11-7-4-4-4-0	(.011)	10-8-6-2-2-2	(.034)
12-6-6-2-2-2	(.015)	11-7-4-4-3-1	(.040)	10-8-5-5-2-0	(.007)
12-6-5-5-1-1	(.006)	11-7-4-4-2-2	(.055)	10-8-5-5-1-1	(.014)
12-6-5-4-3-0	(.005)	11-7-4-3-3-2	(.069)	10-8-5-4-3-0	(.012)
12-6-5-4-2-1	(.015)	11-7-3-3-3-3	(.087)	10-8-5-4-2-1	(.034)
12-6-5-3-3-1	(.020)	11-6-6-5-2-0	(.006)	10-8-5-3-3-1	(.044)
12-6-5-3-2-2	(.029)	11-6-6-5-1-1	(.012)	10-8-5-3-2-2	(.062)
12-6-4-4-4-0	(.006)	11-6-6-4-3-0	(.010)	10-8-4-4-4-0	(.014)
12-6-4-4-3-1	(.024)	11-6-6-4-2-1	(.029)	10-8-4-4-3-1	(.051)
12-6-4-4-2-2	(.035)	11-6-6-3-3-1	(.038)	10-8-4-4-2-2	(.070)
12-6-4-3-3-2	(.044)	11-6-6-3-2-2	(.054)	10-8-4-3-3-2	(.095)
12-6-3-3-3-3	(.057)	11-6-5-5-3-0	(.012)	10-8-3-3-3-3	(.116)
12-5-5-5-3-0	(.006)	11-6-5-5-2-1	(.035)	10-7-7-4-2-0	(.007)
12-5-5-5-2-1	(.018)	11-6-5-4-4-0	(.015)	10-7-7-4-1-1	(.014)
12-5-5-4-4-0	(.008)	11-6-5-4-3-1	(.054)	10-7-7-3-3-0	(.009)
12-5-5-4-3-1	(.029)	11-6-5-4-2-2	(.072)	10-7-7-3-2-1	(.026)
12-5-5-4-2-2	(.040)	11-6-5-3-3-2	(.096)	10-7-7-2-2-2	(.039)
12-5-5-3-3-2	(.054)	11-6-4-4-4-1	(.064)	10-7-6-5-2-0	(.010)
12-5-4-4-4-1	(.035)	11-6-4-4-3-2	(.110)	10-7-6-5-1-1	(.018)
12-5-4-4-3-2	(.064)	11-6-4-3-3-3	(.137)	10-7-6-4-3-0	(.016)
12-5-4-3-3-3	(.082)	11-5-5-5-4-0	(.018)	10-7-6-4-2-1	(.044)
12-4-4-4-4-2	(.073)	11-5-5-5-3-1	(.063)	10-7-6-3-3-1	(.055)
12-4-4-4-3-3	(.098)	11-5-5-5-2-2	(.084)	10-7-6-3-2-2	(.080)
11-10-3-2-2-2	(.005)	11-5-5-4-4-1	(.072)	10-7-5-5-3-0	(.018)
11-9-5-2-2-1	(.005)	11-5-5-4-3-2	(.128)	10-7-5-5-2-1	(.049)
11-9-4-3-2-1	(.007)	11-5-5-3-3-3	(.161)	10-7-5-4-4-0	(.023)
11-9-4-2-2-2	(.011)	11-5-4-4-4-2	(.147)	10-7-5-4-3-1	(.080)
11-9-3-3-3-1	(.010)	11-5-4-4-3-3	(.184)	10-7-5-4-2-2	(.107)
11-9-3-3-2-2	(.014)	10-10-5-2-2-1	(.005)	10-7-5-3-3-2	(.133)
11-8-6-2-2-1	(.006)	10-10-4-3-2-1	(.008)	10-7-4-4-4-1	(.095)
11-8-5-4-1-1	(.006)	10-10-4-2-2-2	(.012)	10-7-4-4-3-2	(.161)
11-8-5-3-2-1	(.013)	10-10-3-3-3-1	(.010)	10-7-4-3-3-3	(.192)

10-6-6-6-2-0	(.011)	9-8-6-4-2-1	(.051)	8-8-7-5-2-0	(.015)
10-6-6-6-1-1	(.021)	9-8-6-3-3-1	(.067)	8-8-7-5-1-1	(.029)
10-6-6-5-3-0	(.021)	9-8-6-3-2-2	(.095)	8-8-7-4-3-0	(.024)
10-6-6-5-2-1	(.057)	9-8-5-5-3-0	(.023)	8-8-7-4-2-1	(.065)
10-6-6-4-4-0	(.027)	9-8-5-5-2-1	(.062)	8-8-7-3-3-1	(.082)
10-6-6-4-3-1	(.086)	9-8-5-4-4-0	(.027)	8-8-7-3-2-2	(.111)
10-6-6-4-2-2	(.120)	9-8-5-4-3-1	(.095)	8-8-6-6-2-0	(.018)
10-6-6-3-3-2	(.146)	9-8-5-4-2-2	(.125)	8-8-6-6-1-1	(.034)
10-6-5-5-4-0	(.031)	9-8-5-3-3-2	(.161)	8-8-6-5-3-0	(.034)
10-6-5-5-3-1	(.102)	9-8-4-4-4-1	(.108)	8-8-6-5-2-1	(.084)
10-6-5-5-2-2	(.136)	9-8-4-4-3-2	(.182)	8-8-6-4-4-0	(.040)
10-6-5-4-4-1	(.119)	9-7-7-6-1-0	(.005)	8-8-6-4-3-1	(.125)
10-5-5-5-5-0	(.038)	9-7-7-5-2-0	(.014)	8-8-6-4-2-2	(.165)
10-5-5-5-4-1	(.136)	9-7-7-5-1-1	(.026)	8-8-5-5-4-0	(.047)
9-9-7-3-1-1	(.007)	9-7-7-4-3-0	(.021)	8-8-5-5-3-1	(.141)
9-9-7-2-2-1	(.011)	9-7-7-4-2-1	(.058)	8-8-5-5-2-2	(.193)
9-9-6-4-2-0	(.007)	9-7-7-3-3-1	(.071)	8-8-5-4-4-1	(.165)
9-9-6-4-1-1	(.013)	9-7-7-3-2-2	(.103)	8-7-7-7-1-0	(.006)
9-9-6-3-3-0	(.009)	9-7-6-6-2-0	(.016)	8-7-7-6-2-0	(.020)
9-9-6-3-2-1	(.026)	9-7-6-6-1-1	(.030)	8-7-7-6-1-1	(.039)
9-9-6-2-2-2	(.037)	9-7-6-5-3-0	(.030)	8-7-7-5-3-0	(.039)
9-9-5-5-2-0	(.008)	9-7-6-5-2-1	(.080)	8-7-7-5-2-1	(.098)
9-9-5-5-1-1	(.016)	9-7-6-4-4-0	(.037)	8-7-7-4-4-0	(.045)
9-9-5-4-3-0	(.013)	9-7-6-4-3-1	(.116)	8-7-7-4-3-1	(.140)
9-9-5-4-2-1	(.037)	9-7-6-4-2-2	(.161)	8-7-7-4-2-2	(.186)
9-9-5-3-3-1	(.046)	9-7-6-3-3-2	(.192)	8-7-6-6-3-0	(.044)
9-9-5-3-2-2	(.067)	9-7-5-5-4-0	(.044)	8-7-6-6-2-1	(.107)
9-9-4-4-4-0	(.017)	9-7-5-5-3-1	(.133)	8-7-6-5-4-0	(.062)
9-9-4-4-3-1	(.056)	9-7-5-5-2-2	(.178)	8-7-6-5-3-1	(.178)
9-9-4-4-2-2	(.080)	9-7-5-4-4-1	(.161)	8-7-5-5-5-0	(.068)
9-9-4-3-3-2	(.099)	9-6-6-6-3-0	(.035)	8-6-6-6-4-0	(.068)
9-9-3-3-3-3	(.120)	9-6-6-6-2-1	(.086)	8-6-6-5-5-0	(.081)
9-8-8-3-1-1	(.009)	9-6-6-5-4-0	(.048)	7-7-7-7-2-0	(.022)
9-8-8-2-2-1	(.013)	9-6-6-5-3-1	(.146)	7-7-7-7-1-1	(.040)
9-8-7-4-2-0	(.009)	9-6-6-4-4-1	(.167)	7-7-7-6-3-0	(.047)
9-8-7-4-1-1	(.017)	9-6-5-5-5-0	(.057)	7-7-7-6-2-1	(.117)
9-8-7-3-3-0	(.011)	8-8-8-4-2-0	(.010)	7-7-7-5-4-0	(.067)
9-8-7-3-2-1	(.032)	8-8-8-4-1-1	(.018)	7-7-7-5-3-1	(.195)
9-8-7-2-2-2	(.045)	8-8-8-3-3-0	(.013)	7-7-6-6-4-0	(.080)
9-8-6-5-2-0	(.012)	8-8-8-3-2-1	(.036)	7-7-6-5-5-0	(.087)
9-8-6-5-1-1	(.023)	8-8-8-2-2-2	(.049)	7-6-6-6-5-0	(.102)
9-8-6-4-3-0	(.019)	8-8-7-6-1-0	(.005)	6-6-6-6-6-0	(.111)

Table 16. Outcomes and corresponding significance levels ($.005 \leq P \leq .205$) in the multinomials, N=7, 8,...,28; k=7; $\varphi_i = 1/7$ for each i.

N = 7		4-3-2-1-0-0-0	(.074)	4-3-3-2-0-0-0	(.055)
		4-3-1-1-1-0-0	(.170)	4-3-3-1-1-0-0	(.151)
5-1-1-0-0-0-0	(.009)	4-2-2-2-0-0-0	(.114)	3-3-3-3-0-0-0	(.092)
4-2-1-0-0-0-0	(.035)	3-3-3-1-0-0-0	(.105)		
4-1-1-1-0-0-0	(.116)	3-3-2-2-0-0-0	(.133)		
3-3-1-0-0-0-0	(.053)			**N = 13**	
3-2-2-0-0-0-0	(.116)				
		N = 11		7-3-1-1-1-0-0	(.005)
				7-2-2-1-1-0-0	(.009)
N = 8		6-3-1-1-0-0-0	(.006)	7-2-1-1-1-1-0	(.021)
		6-2-2-1-0-0-0	(.012)	7-1-1-1-1-1-1	(.058)
5-2-1-0-0-0-0	(.008)	6-2-1-1-1-0-0	(.030)	6-4-2-1-0-0-0	(.005)
5-1-1-1-0-0-0	(.026)	6-1-1-1-1-1-0	(.063)	6-4-1-1-1-0-0	(.016)
4-3-1-0-0-0-0	(.018)	5-4-1-1-0-0-0	(.012)	6-3-3-1-0-0-0	(.007)
4-2-2-0-0-0-0	(.034)	5-3-2-1-0-0-0	(.030)	6-3-2-2-0-0-0	(.016)
4-2-1-1-0-0-0	(.105)	5-3-1-1-1-0-0	(.063)	6-3-2-1-1-0-0	(.033)
3-3-2-0-0-0-0	(.044)	5-2-2-2-0-0-0	(.040)	6-3-1-1-1-1-0	(.070)
3-3-1-1-0-0-0	(.146)	5-2-2-1-1-0-0	(.112)	6-2-2-2-1-0-0	(.056)
		4-4-3-0-0-0-0	(.006)	6-2-2-1-1-1-0	(.124)
N = 9		4-4-2-1-0-0-0	(.037)	5-5-2-1-0-0-0	(.006)
		4-4-1-1-1-0-0	(.085)	5-5-1-1-1-0-0	(.017)
6-1-1-1-0-0-0	(.006)	4-3-3-1-0-0-0	(.050)	5-4-3-1-0-0-0	(.016)
5-2-2-0-0-0-0	(.010)	4-3-2-2-0-0-0	(.085)	5-4-2-2-0-0-0	(.020)
5-2-1-1-0-0-0	(.032)	3-3-3-2-0-0-0	(.118)	5-4-2-1-1-0-0	(.056)
5-1-1-1-1-0-0	(.068)			5-4-1-1-1-1-0	(.124)
4-4-1-0-0-0-0	(.008)	**N = 12**		5-3-3-2-0-0-0	(.033)
4-3-2-0-0-0-0	(.016)			5-3-3-1-1-0-0	(.070)
4-3-1-1-0-0-0	(.060)	7-2-1-1-1-0-0	(.006)	5-3-2-2-1-0-0	(.124)
4-2-2-1-0-0-0	(.107)	7-1-1-1-1-1-0	(.015)	5-2-2-2-2-0-0	(.145)
3-3-3-0-0-0-0	(.033)	6-3-2-1-0-0-0	(.009)	4-4-4-1-0-0-0	(.017)
3-3-2-1-0-0-0	(.159)	6-3-1-1-1-0-0	(.022)	4-4-3-2-0-0-0	(.037)
		6-2-2-2-0-0-0	(.015)	4-4-3-1-1-0-0	(.082)
N = 10		6-2-2-1-1-0-0	(.044)	4-4-2-2-1-0-0	(.142)
		6-2-1-1-1-1-0	(.091)	4-3-3-3-0-0-0	(.058)
6-2-1-1-0-0-0	(.008)	6-1-1-1-1-1-1	(.161)	4-3-3-2-1-0-0	(.192)
6-1-1-1-1-0-0	(.020)	5-4-2-1-0-0-0	(.015)		
5-3-2-0-0-0-0	(.008)	5-4-1-1-1-0-0	(.044)	**N = 14**	
5-3-1-1-0-0-0	(.020)	5-3-3-1-0-0-0	(.022)		
5-2-2-1-0-0-0	(.036)	5-3-2-2-0-0-0	(.044)	8-2-1-1-1-1-0	(.006)
5-2-1-1-1-0-0	(.096)	5-3-2-1-1-0-0	(.091)	8-1-1-1-1-1-1	(.014)
5-1-1-1-1-1-0	(.175)	5-3-1-1-1-1-0	(.161)	7-3-2-1-1-0-0	(.011)
4-4-2-0-0-0-0	(.010)	5-2-2-2-1-0-0	(.126)	7-3-1-1-1-1-0	(.022)
4-4-1-1-0-0-0	(.025)	4-4-3-1-0-0-0	(.026)	7-2-2-2-1-0-0	(.014)
4-3-3-0-0-0-0	(.011)	4-4-2-2-0-0-0	(.047)	7-2-2-1-1-1-0	(.034)
		4-4-2-1-1-0-0	(.110)	7-2-1-1-1-1-1	(.073)

6-5-1-1-1-0-0	(.006)
6-4-3-1-0-0-0	(.005)
6-4-2-2-0-0-0	(.008)
6-4-2-1-1-0-0	(.021)
6-4-1-1-1-1-0	(.054)
6-3-3-2-0-0-0	(.012)
6-3-3-1-1-0-0	(.030)
6-3-2-2-1-0-0	(.054)
6-3-2-1-1-1-0	(.104)
6-3-1-1-1-1-1	(.195)
6-2-2-2-2-0-0	(.072)
6-2-2-2-1-1-0	(.165)
5-5-3-1-0-0-0	(.006)
5-5-2-2-0-0-0	(.011)
5-5-2-1-1-0-0	(.025)
5-5-1-1-1-1-0	(.055)
5-4-4-1-0-0-0	(.008)
5-4-3-2-0-0-0	(.021)
5-4-3-1-1-0-0	(.054)
5-4-2-2-1-0-0	(.072)
5-4-2-1-1-1-0	(.165)
5-3-3-3-0-0-0	(.030)
5-3-3-2-1-0-0	(.104)
5-3-3-1-1-1-0	(.195)
5-3-2-2-2-0-0	(.165)
4-4-4-2-0-0-0	(.026)
4-4-4-1-1-0-0	(.057)
4-4-3-3-0-0-0	(.031)
4-4-3-2-1-0-0	(.127)
4-4-2-2-2-0-0	(.181)
4-3-3-3-1-0-0	(.175)

N = 15

8-3-1-1-1-1-0	(.007)
8-2-2-2-1-0-0	(.005)
8-2-2-1-1-1-0	(.012)
8-2-1-1-1-1-1	(.025)
7-4-2-1-1-0-0	(.007)
7-4-1-1-1-1-0	(.016)
7-3-3-1-1-0-0	(.009)
7-3-2-2-1-0-0	(.016)
7-3-2-1-1-1-0	(.036)
7-3-1-1-1-1-1	(.079)
7-2-2-2-2-0-0	(.025)
7-2-2-2-1-1-0	(.049)
7-2-2-1-1-1-1	(.111)
6-5-2-1-1-0-0	(.011)
6-5-1-1-1-1-0	(.024)
6-4-3-2-0-0-0	(.008)
6-4-3-1-1-0-0	(.021)
6-4-2-2-1-0-0	(.032)
6-4-2-1-1-1-0	(.079)
6-4-1-1-1-1-1	(.155)
6-3-3-3-0-0-0	(.012)
6-3-3-2-1-0-0	(.046)
6-3-3-1-1-1-0	(.096)
6-3-2-2-2-0-0	(.079)
6-3-2-2-1-1-0	(.155)
5-5-4-1-0-0-0	(.005)
5-5-3-2-0-0-0	(.011)
5-5-3-1-1-0-0	(.024)
5-5-2-2-1-0-0	(.039)
5-5-2-1-1-1-0	(.083)
5-5-1-1-1-1-1	(.156)
5-4-4-2-0-0-0	(.013)
5-4-4-1-1-0-0	(.032)
5-4-3-3-0-0-0	(.021)
5-4-3-2-1-0-0	(.079)
5-4-3-1-1-1-0	(.155)
5-4-2-2-2-0-0	(.101)
5-3-3-3-1-0-0	(.096)
5-3-3-2-2-0-0	(.155)
4-4-4-3-0-0-0	(.024)
4-4-4-2-1-0-0	(.087)
4-4-4-1-1-1-0	(.171)
4-4-3-3-1-0-0	(.110)
4-4-3-2-2-0-0	(.171)

N = 16

9-2-1-1-1-1-1	(.007)
8-4-1-1-1-1-0	(.006)
8-3-2-2-1-0-0	(.006)
8-3-2-1-1-1-0	(.013)
8-3-1-1-1-1-1	(.024)
8-2-2-2-2-0-0	(.008)
8-2-2-2-1-1-0	(.021)
8-2-2-1-1-1-1	(.042)
7-5-1-1-1-1-0	(.008)
7-4-3-1-1-0-0	(.007)
7-4-2-2-1-0-0	(.013)
7-4-2-1-1-1-0	(.024)
7-4-1-1-1-1-1	(.058)
7-3-3-2-1-0-0	(.017)
7-3-3-1-1-1-0	(.034)
7-3-2-2-2-0-0	(.024)
7-3-2-2-1-1-0	(.058)
7-3-2-1-1-1-1	(.113)
7-2-2-2-2-1-0	(.084)
7-2-2-2-1-1-1	(.154)
6-6-2-1-1-0-0	(.005)
6-6-1-1-1-1-0	(.010)
6-5-3-1-1-0-0	(.010)
6-5-2-2-1-0-0	(.020)
6-5-2-1-1-1-0	(.041)
6-5-1-1-1-1-1	(.079)
6-4-4-2-0-0-0	(.006)
6-4-4-1-1-0-0	(.015)
6-4-3-3-0-0-0	(.008)
6-4-3-2-1-0-0	(.032)
6-4-3-1-1-1-0	(.075)
6-4-2-2-2-0-0	(.051)
6-4-2-2-1-1-0	(.110)
6-3-3-3-1-0-0	(.043)
6-3-3-2-2-0-0	(.075)
6-3-3-2-1-1-0	(.142)
5-5-4-2-0-0-0	(.008)
5-5-4-1-1-0-0	(.020)
5-5-3-3-0-0-0	(.010)
5-5-3-2-1-0-0	(.041)
5-5-3-1-1-1-0	(.079)
5-5-2-2-2-0-0	(.059)
5-5-2-2-1-1-0	(.120)
5-4-4-3-0-0-0	(.015)
5-4-4-2-1-0-0	(.051)
5-4-4-1-1-1-0	(.110)
5-4-3-3-1-0-0	(.075)
5-4-3-2-2-0-0	(.110)
5-3-3-3-2-0-0	(.142)
4-4-4-4-0-0-0	(.020)
4-4-4-3-1-0-0	(.082)
4-4-4-2-2-0-0	(.122)
4-4-3-3-2-0-0	(.152)

N = 17

9-3-1-1-1-1-1	(.007)
9-2-2-2-1-1-0	(.006)
9-2-2-1-1-1-1	(.014)
8-4-2-1-1-1-0	(.010)
8-4-1-1-1-1-1	(.022)
8-3-3-2-1-0-0	(.006)
8-3-3-1-1-1-0	(.014)
8-3-2-2-2-0-0	(.010)
8-3-2-2-1-1-0	(.022)
8-3-2-1-1-1-1	(.044)
8-2-2-2-2-1-0	(.032)
8-2-2-2-1-1-1	(.072)
7-5-3-1-1-0-0	(.005)

7-5-2-2-1-0-0 (.007)
7-5-2-1-1-1-0 (.015)
7-5-1-1-1-1-1 (.035)
7-4-4-1-1-0-0 (.006)
7-4-3-2-1-0-0 (.014)
7-4-3-1-1-1-0 (.028)
7-4-2-2-2-0-0 (.022)
7-4-2-2-1-1-0 (.044)
7-4-2-1-1-1-1 (.084)
7-3-3-3-1-0-0 (.015)
7-3-3-2-2-0-0 (.028)
7-3-3-2-1-1-0 (.060)
7-3-3-1-1-1-1 (.113)
7-3-2-2-2-1-0 (.084)
7-3-2-2-1-1-1 (.166)
7-2-2-2-2-2-0 (.130)
6-6-3-1-1-0-0 (.005)
6-6-2-2-1-0-0 (.009)
6-6-2-1-1-1-0 (.020)
6-6-1-1-1-1-1 (.040)
6-5-4-1-1-0-0 (.009)
6-5-3-3-0-0-0 (.005)
6-5-3-2-1-0-0 (.020)
6-5-3-1-1-1-0 (.040)
6-5-2-2-2-0-0 (.031)
6-5-2-2-1-1-0 (.071)
6-5-2-1-1-1-1 (.126)
6-4-4-3-0-0-0 (.007)
6-4-4-2-1-0-0 (.025)
6-4-4-1-1-1-0 (.055)
6-4-3-3-1-0-0 (.035)
6-4-3-2-2-0-0 (.055)
6-4-3-2-1-1-0 (.112)
6-4-2-2-2-1-0 (.158)
6-3-3-3-2-0-0 (.074)
6-3-3-3-1-1-0 (.135)
5-5-5-2-0-0-0 (.005)
5-5-5-1-1-0-0 (.010)
5-5-4-3-0-0-0 (.009)
5-5-4-2-1-0-0 (.031)
5-5-4-1-1-1-0 (.071)
5-5-3-3-1-0-0 (.040)
5-5-3-2-2-0-0 (.071)
5-5-3-2-1-1-0 (.126)
5-5-2-2-2-1-0 (.172)
5-4-4-4-0-0-0 (.010)
5-4-4-3-1-0-0 (.055)
5-4-4-2-2-0-0 (.077)
5-4-4-2-1-1-0 (.158)
5-4-3-3-2-0-0 (.112)
5-3-3-3-3-0-0 (.135)
4-4-4-4-1-0-0 (.071)
4-4-4-3-2-0-0 (.130)
4-4-3-3-3-0-0 (.161)

N = 18

9-4-1-1-1-1-1 (.007)
9-3-2-2-1-1-0 (.007)
9-3-2-1-1-1-1 (.013)
9-2-2-2-2-1-0 (.012)
9-2-2-2-1-1-1 (.025)
8-5-2-1-1-1-0 (.006)
8-5-1-1-1-1-1 (.012)
8-4-3-2-1-0-0 (.005)
8-4-3-1-1-1-0 (.012)
8-4-2-2-2-0-0 (.007)
8-4-2-2-1-1-0 (.017)
8-4-2-1-1-1-1 (.039)
8-3-3-3-1-0-0 (.007)
8-3-3-2-2-0-0 (.012)
8-3-3-2-1-1-0 (.025)
8-3-3-1-1-1-1 (.049)
8-3-2-2-2-1-0 (.039)
8-3-2-2-1-1-1 (.075)
8-2-2-2-2-2-0 (.051)
8-2-2-2-2-1-1 (.108)
7-6-2-1-1-1-0 (.009)
7-6-1-1-1-1-1 (.018)
7-5-3-2-1-0-0 (.009)
7-5-3-1-1-1-0 (.018)
7-5-2-2-2-0-0 (.012)
7-5-2-2-1-1-0 (.029)
7-5-2-1-1-1-1 (.056)
7-4-4-2-1-0-0 (.012)
7-4-4-1-1-1-0 (.025)
7-4-3-3-1-0-0 (.013)
7-4-3-2-2-0-0 (.025)
7-4-3-2-1-1-0 (.049)
7-4-3-1-1-1-1 (.095)
7-4-2-2-2-1-0 (.075)
7-4-2-2-1-1-1 (.132)
7-3-3-3-2-0-0 (.030)
7-3-3-3-1-1-0 (.057)
7-3-3-2-2-1-0 (.095)
7-3-3-2-1-1-1 (.174)
7-3-2-2-2-2-0 (.132)
6-6-3-2-1-0-0 (.010)
6-6-3-1-1-1-0 (.021)
6-6-2-2-2-0-0 (.016)
6-6-2-2-1-1-0 (.037)
6-6-2-1-1-1-1 (.070)
6-5-5-1-1-0-0 (.005)
6-5-4-2-1-0-0 (.016)
6-5-4-1-1-1-0 (.037)
6-5-3-3-1-0-0 (.021)
6-5-3-2-2-0-0 (.037)
6-5-3-2-1-1-0 (.070)
6-5-3-1-1-1-1 (.125)
6-5-2-2-2-1-0 (.107)
6-5-2-2-1-1-1 (.194)
6-4-4-4-0-0-0 (.006)
6-4-4-3-1-0-0 (.027)
6-4-4-2-2-0-0 (.042)
6-4-4-2-1-1-0 (.087)
6-4-4-1-1-1-1 (.169)
6-4-3-3-2-0-0 (.055)
6-4-3-3-1-1-0 (.119)
6-4-3-2-2-1-0 (.169)
6-3-3-3-3-0-0 (.075)
5-5-5-3-0-0-0 (.005)
5-5-5-2-1-0-0 (.019)
5-5-5-1-1-1-0 (.040)
5-5-4-4-0-0-0 (.007)
5-5-4-3-1-0-0 (.037)
5-5-4-2-2-0-0 (.051)
5-5-4-2-1-1-0 (.107)
5-5-4-1-1-1-1 (.194)
5-5-3-3-2-0-0 (.070)
5-5-3-3-1-1-0 (.125)
5-5-3-2-2-1-0 (.194)
5-4-4-4-1-0-0 (.042)
5-4-4-3-2-0-0 (.087)
5-4-4-3-1-1-0 (.169)
5-4-3-3-3-0-0 (.119)
4-4-4-4-2-0-0 (.108)
4-4-4-4-1-1-0 (.195)
4-4-4-3-3-0-0 (.127)

N = 19

10-3-2-1-1-1-1 (.005)
10-2-2-2-1-1-1 (.007)
9-5-1-1-1-1-1 (.005)
9-4-2-2-1-1-0 (.006)
9-4-2-1-1-1-1 (.013)
9-3-3-2-1-1-0 (.008)
9-3-3-1-1-1-1 (.016)
9-3-2-2-2-1-0 (.013)
9-3-2-2-1-1-1 (.026)
9-2-2-2-2-2-0 (.022)

9-2-2-2-2-1-1	(.044)	6-6-3-2-2-0-0	(.019)	9-3-3-3-2-0-0	(.005)
8-6-1-1-1-1-1	(.007)	6-6-3-2-1-1-0	(.039)	9-3-3-3-1-1-0	(.010)
8-5-3-1-1-1-0	(.007)	6-6-3-1-1-1-1	(.074)	9-3-3-2-2-1-0	(.015)
8-5-2-2-2-0-0	(.005)	6-6-2-2-2-1-0	(.062)	9-3-3-2-1-1-1	(.030)
8-5-2-2-1-1-0	(.011)	6-6-2-2-1-1-1	(.121)	9-3-2-2-2-2-0	(.025)
8-5-2-1-1-1-1	(.024)	6-5-5-2-1-0-0	(.011)	9-3-2-2-2-1-1	(.050)
8-4-4-1-1-1-0	(.009)	6-5-5-1-1-1-0	(.023)	9-2-2-2-2-2-1	(.077)
8-4-3-3-1-0-0	(.006)	6-5-4-3-1-0-0	(.019)	8-6-2-2-1-1-0	(.007)
8-4-3-2-2-0-0	(.009)	6-5-4-2-2-0-0	(.029)	8-6-2-1-1-1-1	(.015)
8-4-3-2-1-1-0	(.022)	6-5-4-2-1-1-0	(.062)	8-5-4-1-1-1-0	(.007)
8-4-3-1-1-1-1	(.044)	6-5-4-1-1-1-1	(.121)	8-5-3-2-2-0-0	(.007)
8-4-2-2-2-1-0	(.030)	6-5-3-3-2-0-0	(.039)	8-5-3-2-1-1-0	(.015)
8-4-2-2-1-1-1	(.064)	6-5-3-3-1-1-0	(.074)	8-5-3-1-1-1-1	(.029)
8-3-3-3-2-0-0	(.013)	6-5-3-2-2-1-0	(.121)	8-5-2-2-2-1-0	(.022)
8-3-3-3-1-1-0	(.026)	6-5-3-2-1-1-1	(.201)	8-5-2-2-1-1-1	(.044)
8-3-3-2-2-1-0	(.044)	6-5-2-2-2-2-0	(.156)	8-4-4-3-1-0-0	(.005)
8-3-3-2-1-1-1	(.085)	6-4-4-4-1-0-0	(.023)	8-4-4-2-2-0-0	(.008)
8-3-2-2-2-2-0	(.064)	6-4-4-3-2-0-0	(.046)	8-4-4-2-1-1-0	(.018)
8-3-2-2-2-1-1	(.125)	6-4-4-3-1-1-0	(.093)	8-4-4-1-1-1-1	(.038)
8-2-2-2-2-2-1	(.157)	6-4-4-2-2-1-0	(.136)	8-4-3-3-2-0-0	(.012)
7-7-1-1-1-1-1	(.008)	6-4-3-3-3-0-0	(.065)	8-4-3-3-1-1-0	(.025)
7-6-3-2-1-0-0	(.005)	6-4-3-3-2-1-0	(.178)	8-4-3-2-2-1-0	(.038)
7-6-3-1-1-1-0	(.010)	5-5-5-4-0-0-0	(.005)	8-4-3-2-1-1-1	(.077)
7-6-2-2-2-0-0	(.007)	5-5-5-3-1-0-0	(.023)	8-4-2-2-2-2-0	(.051)
7-6-2-2-1-1-0	(.016)	5-5-5-2-2-0-0	(.034)	8-4-2-2-2-1-1	(.105)
7-6-2-1-1-1-1	(.034)	5-5-5-2-1-1-0	(.067)	8-3-3-3-3-0-0	(.015)
7-5-4-2-1-0-0	(.007)	5-5-5-1-1-1-1	(.125)	8-3-3-3-2-1-0	(.050)
7-5-4-1-1-1-0	(.016)	5-5-4-4-1-0-0	(.029)	8-3-3-3-1-1-1	(.091)
7-5-3-3-1-0-0	(.010)	5-5-4-3-2-0-0	(.062)	8-3-3-2-2-2-0	(.077)
7-5-3-2-2-0-0	(.016)	5-5-4-3-1-1-0	(.121)	8-3-3-2-2-1-1	(.135)
7-5-3-2-1-1-0	(.034)	5-5-4-2-2-1-0	(.156)	8-3-2-2-2-2-1	(.193)
7-5-3-1-1-1-1	(.066)	5-5-3-3-3-0-0	(.074)	7-7-3-1-1-1-0	(.005)
7-5-2-2-2-1-0	(.048)	5-5-3-3-2-1-0	(.201)	7-7-2-2-1-1-0	(.008)
7-5-2-2-1-1-1	(.095)	5-4-4-4-2-0-0	(.068)	7-7-2-1-1-1-1	(.016)
7-4-4-3-1-0-0	(.013)	5-4-4-4-1-1-0	(.136)	7-6-4-1-1-1-0	(.010)
7-4-4-2-2-0-0	(.022)	5-4-4-3-3-0-0	(.093)	7-6-3-3-1-0-0	(.005)
7-4-4-2-1-1-0	(.044)	4-4-4-4-3-0-0	(.121)	7-6-3-2-2-0-0	(.010)
7-4-4-1-1-1-1	(.085)			7-6-3-2-1-1-0	(.020)
7-4-3-3-2-0-0	(.026)			7-6-3-1-1-1-1	(.042)
7-4-3-3-1-1-0	(.051)	N = 20		7-6-2-2-2-1-0	(.029)
7-4-3-2-2-1-0	(.085)			7-6-2-2-1-1-1	(.059)
7-4-3-2-1-1-1	(.145)	10-3-3-1-1-1-1	(.005)	7-5-5-2-1-0-0	(.005)
7-4-2-2-2-2-0	(.125)	10-3-2-2-1-1-1	(.010)	7-5-5-1-1-1-0	(.010)
7-3-3-3-3-0-0	(.034)	10-2-2-2-2-2-0	(.007)	7-5-4-3-1-0-0	(.010)
7-3-3-3-2-1-0	(.099)	10-2-2-2-2-1-1	(.015)	7-5-4-2-2-0-0	(.015)
7-3-3-3-1-1-1	(.201)	9-5-2-1-1-1-1	(.010)	7-5-4-2-1-1-0	(.029)
7-3-3-2-2-2-0	(.145)	9-4-3-2-1-1-0	(.007)	7-5-4-1-1-1-1	(.059)
6-6-4-2-1-0-0	(.008)	9-4-3-1-1-1-1	(.015)	7-5-3-3-2-0-0	(.020)
6-6-4-1-1-1-0	(.019)	9-4-2-2-2-1-0	(.012)	7-5-3-3-1-1-0	(.042)
6-6-3-3-1-0-0	(.012)	9-4-2-2-1-1-1	(.025)	7-5-3-2-2-1-0	(.059)

7-5-3-2-1-1-1	(.108)	5-5-4-3-3-0-0	(.070)	8-4-4-3-2-0-0	(.011)
7-5-2-2-2-2-0	(.082)	5-5-4-3-2-1-0	(.192)	8-4-4-3-1-1-0	(.022)
7-5-2-2-2-1-1	(.154)	5-4-4-4-3-0-0	(.081)	8-4-4-2-2-1-0	(.032)
7-4-4-4-1-0-0	(.012)	4-4-4-4-4-0-0	(.103)	8-4-4-2-1-1-1	(.064)
7-4-4-3-2-0-0	(.025)			8-4-3-3-3-0-0	(.015)
7-4-4-3-1-1-0	(.050)			8-4-3-3-2-1-0	(.046)
7-4-4-2-2-1-0	(.077)	N = 21		8-4-3-3-1-1-1	(.089)
7-4-4-2-1-1-1	(.135)			8-4-3-2-2-2-0	(.064)
7-4-3-3-3-0-0	(.030)	10-4-3-1-1-1-1	(.006)	8-4-3-2-2-1-1	(.127)
7-4-3-3-2-1-0	(.091)	10-4-2-2-1-1-1	(.009)	8-4-2-2-2-2-1	(.167)
7-4-3-3-1-1-1	(.159)	10-3-3-2-2-1-0	(.006)	8-3-3-3-3-1-0	(.056)
7-4-3-2-2-2-0	(.135)	10-3-3-2-1-1-1	(.011)	8-3-3-3-2-2-0	(.089)
7-3-3-3-3-1-0	(.111)	10-3-2-2-2-2-0	(.009)	8-3-3-3-2-1-1	(.154)
7-3-3-3-2-2-0	(.159)	10-3-2-2-2-1-1	(.019)	7-7-3-2-1-1-0	(.010)
6-6-5-2-1-0-0	(.006)	10-2-2-2-2-2-1	(.028)	7-7-3-1-1-1-1	(.019)
6-6-5-1-1-1-0	(.012)	9-6-2-1-1-1-1	(.006)	7-7-2-2-2-1-0	(.015)
6-6-4-3-1-0-0	(.010)	9-5-3-2-1-1-0	(.006)	7-7-2-2-1-1-1	(.030)
6-6-4-2-2-0-0	(.017)	9-5-3-1-1-1-1	(.011)	7-6-5-1-1-1-0	(.006)
6-6-4-2-1-1-0	(.034)	9-5-2-2-2-1-0	(.009)	7-6-4-3-1-0-0	(.006)
6-6-4-1-1-1-1	(.070)	9-5-2-2-1-1-1	(.019)	7-6-4-2-2-0-0	(.009)
6-6-3-3-2-0-0	(.022)	9-4-4-2-1-1-0	(.007)	7-6-4-2-1-1-0	(.019)
6-6-3-3-1-1-0	(.045)	9-4-4-1-1-1-1	(.015)	7-6-4-1-1-1-1	(.038)
6-6-3-2-2-1-0	(.070)	9-4-3-3-1-1-0	(.010)	7-6-3-3-2-0-0	(.011)
6-6-3-2-1-1-1	(.125)	9-4-3-2-2-1-0	(.015)	7-6-3-3-1-1-0	(.023)
6-6-2-2-2-2-0	(.103)	9-4-3-2-1-1-1	(.030)	7-6-3-2-2-1-0	(.038)
6-6-2-2-2-1-1	(.192)	9-4-2-2-2-2-0	(.022)	7-6-3-2-1-1-1	(.072)
6-5-5-3-1-0-0	(.012)	9-4-2-2-2-1-1	(.046)	7-6-2-2-2-2-0	(.055)
6-5-5-2-2-0-0	(.021)	9-3-3-3-3-0-0	(.006)	7-6-2-2-2-1-1	(.096)
6-5-5-2-1-1-0	(.042)	9-3-3-3-2-1-0	(.019)	7-5-5-3-1-0-0	(.006)
6-5-5-1-1-1-1	(.078)	9-3-3-3-1-1-1	(.038)	7-5-5-2-2-0-0	(.010)
6-5-4-4-1-0-0	(.017)	9-3-3-2-2-2-0	(.030)	7-5-5-2-1-1-0	(.021)
6-5-4-3-2-0-0	(.034)	9-3-3-2-2-1-1	(.056)	7-5-5-1-1-1-1	(.042)
6-5-4-3-1-1-0	(.070)	9-3-2-2-2-2-1	(.089)	7-5-4-4-1-0-0	(.009)
6-5-4-2-2-1-0	(.103)	9-2-2-2-2-2-2	(.127)	7-5-4-3-2-0-0	(.019)
6-5-4-2-1-1-1	(.192)	8-7-2-1-1-1-1	(.007)	7-5-4-3-1-1-0	(.038)
6-5-3-3-3-0-0	(.045)	8-6-3-2-1-1-0	(.009)	7-5-4-2-2-1-0	(.055)
6-5-3-3-2-1-0	(.125)	8-6-3-1-1-1-1	(.019)	7-5-4-2-1-1-1	(.096)
6-5-3-2-2-2-0	(.192)	8-6-2-2-2-1-0	(.013)	7-5-3-3-3-0-0	(.023)
6-4-4-4-2-0-0	(.043)	8-6-2-2-1-1-1	(.028)	7-5-3-3-2-1-0	(.072)
6-4-4-4-1-1-0	(.081)	8-5-5-1-1-1-0	(.005)	7-5-3-3-1-1-1	(.129)
6-4-4-3-3-0-0	(.053)	8-5-4-2-2-0-0	(.006)	7-5-3-2-2-2-0	(.096)
6-4-4-3-2-1-0	(.151)	8-5-4-2-1-1-0	(.013)	7-5-3-2-2-1-1	(.183)
6-4-3-3-3-1-0	(.200)	8-5-4-1-1-1-1	(.028)	7-4-4-4-2-0-0	(.022)
5-5-5-4-1-0-0	(.021)	8-5-3-3-2-0-0	(.009)	7-4-4-4-1-1-0	(.046)
5-5-5-3-2-0-0	(.042)	8-5-3-3-1-1-0	(.019)	7-4-4-3-3-0-0	(.030)
5-5-5-3-1-1-0	(.078)	8-5-3-2-2-1-0	(.028)	7-4-4-3-2-1-0	(.089)
5-5-5-2-2-1-0	(.110)	8-5-3-2-1-1-1	(.055)	7-4-4-3-1-1-1	(.154)
5-5-5-2-1-1-1	(.202)	8-5-2-2-2-2-0	(.039)	7-4-4-2-2-2-0	(.127)
5-5-4-4-2-0-0	(.051)	8-5-2-2-2-1-1	(.076)	7-4-3-3-3-1-0	(.099)
5-5-4-4-1-1-0	(.103)	8-4-4-4-1-0-0	(.005)	7-4-3-3-2-2-0	(.154)

7-3-3-3-3-2-0	(.185)	10-3-3-3-1-1-1	(.014)	8-5-3-2-2-2-0	(.052)
6-6-6-1-1-1-0	(.007)	10-3-3-2-2-2-0	(.012)	8-5-3-2-2-1-1	(.095)
6-6-5-3-1-0-0	(.007)	10-3-3-2-2-1-1	(.023)	8-5-2-2-2-2-1	(.128)
6-6-5-2-2-0-0	(.012)	10-3-2-2-2-2-1	(.036)	8-4-4-4-2-0-0	(.010)
6-6-5-2-1-1-0	(.025)	10-2-2-2-2-2-2	(.052)	8-4-4-4-1-1-0	(.020)
6-6-5-1-1-1-1	(.048)	9-6-3-1-1-1-1	(.007)	8-4-4-3-3-0-0	(.014)
6-6-4-4-1-0-0	(.010)	9-6-2-2-2-1-0	(.006)	8-4-4-3-2-1-0	(.043)
6-6-4-3-2-0-0	(.020)	9-6-2-2-1-1-1	(.012)	8-4-4-3-1-1-1	(.080)
6-6-4-3-1-1-0	(.042)	9-5-4-2-1-1-0	(.006)	8-4-4-2-2-2-0	(.056)
6-6-4-2-2-1-0	(.062)	9-5-4-1-1-1-1	(.012)	8-4-4-2-2-1-1	(.112)
6-6-4-2-1-1-1	(.120)	9-5-3-3-1-1-0	(.007)	8-4-3-3-3-1-0	(.055)
6-6-3-3-3-0-0	(.028)	9-5-3-2-2-1-0	(.012)	8-4-3-3-2-2-0	(.080)
6-6-3-3-2-1-0	(.080)	9-5-3-2-1-1-1	(.023)	8-4-3-3-2-1-1	(.153)
6-6-3-3-1-1-1	(.143)	9-5-2-2-2-2-0	(.018)	8-3-3-3-3-2-0	(.101)
6-6-3-2-2-2-0	(.120)	9-5-2-2-2-1-1	(.036)	8-3-3-3-3-1-1	(.173)
6-5-5-4-1-0-0	(.012)	9-4-4-3-1-1-0	(.009)	7-7-4-2-1-1-0	(.009)
6-5-5-3-2-0-0	(.025)	9-4-4-2-2-1-0	(.014)	7-7-4-1-1-1-1	(.020)
6-5-5-3-1-1-0	(.048)	9-4-4-2-1-1-1	(.028)	7-7-3-3-2-0-0	(.006)
6-5-5-2-2-1-0	(.075)	9-4-3-3-3-0-0	(.006)	7-7-3-3-1-1-0	(.012)
6-5-5-2-1-1-1	(.134)	9-4-3-3-2-1-0	(.019)	7-7-3-2-2-1-0	(.020)
6-5-4-4-2-0-0	(.031)	9-4-3-3-1-1-1	(.037)	7-7-3-2-1-1-1	(.038)
6-5-4-4-1-1-0	(.062)	9-4-3-2-2-2-0	(.028)	7-7-2-2-2-2-0	(.029)
6-5-4-3-3-0-0	(.042)	9-4-3-2-2-1-1	(.055)	7-7-2-2-2-1-1	(.056)
6-5-4-3-2-1-0	(.120)	9-4-2-2-2-2-1	(.080)	7-6-5-2-2-0-0	(.007)
6-5-4-2-2-2-0	(.166)	9-3-3-3-3-1-0	(.024)	7-6-5-2-1-1-0	(.013)
6-5-3-3-3-1-0	(.143)	9-3-3-3-2-2-0	(.037)	7-6-5-1-1-1-1	(.027)
6-4-4-4-3-0-0	(.049)	9-3-3-3-2-1-1	(.069)	7-6-4-4-1-0-0	(.006)
6-4-4-4-2-1-0	(.138)	9-3-3-2-2-2-1	(.101)	7-6-4-3-2-0-0	(.012)
6-4-4-3-3-1-0	(.175)	9-3-2-2-2-2-2	(.153)	7-6-4-3-1-1-0	(.023)
5-5-5-5-1-0-0	(.015)	8-7-3-2-1-1-0	(.005)	7-6-4-2-2-1-0	(.036)
5-5-5-4-2-0-0	(.038)	8-7-3-1-1-1-1	(.009)	7-6-4-2-1-1-1	(.068)
5-5-5-4-1-1-0	(.075)	8-7-2-2-2-1-0	(.007)	7-6-3-3-3-0-0	(.014)
5-5-5-3-3-0-0	(.048)	8-7-2-2-1-1-1	(.014)	7-6-3-3-2-1-0	(.046)
5-5-5-3-2-1-0	(.134)	8-6-4-2-1-1-0	(.009)	7-6-3-3-1-1-1	(.083)
5-5-5-2-2-2-0	(.184)	8-6-4-1-1-1-1	(.018)	7-6-3-2-2-2-0	(.068)
5-5-4-4-3-0-0	(.062)	8-6-3-3-2-0-0	(.006)	7-6-3-2-2-1-1	(.123)
5-5-4-4-2-1-0	(.166)	8-6-3-3-1-1-0	(.012)	7-6-2-2-2-2-1	(.168)
5-4-4-4-4-0-0	(.076)	8-6-3-2-2-1-0	(.018)	7-5-5-4-1-0-0	(.007)
		8-6-3-2-1-1-1	(.036)	7-5-5-3-2-0-0	(.013)
N = 22		8-6-2-2-2-2-0	(.026)	7-5-5-3-1-1-0	(.027)
		8-6-2-2-2-1-1	(.052)	7-5-5-2-2-1-0	(.041)
		8-5-5-2-2-0-0	(.005)	7-5-5-2-1-1-1	(.075)
11-3-2-2-2-1-1	(.006)	8-5-5-2-1-1-0	(.010)	7-5-4-4-2-0-0	(.018)
11-2-2-2-2-2-1	(.009)	8-5-5-1-1-1-1	(.020)	7-5-4-4-1-1-0	(.036)
10-5-2-2-1-1-1	(.007)	8-5-4-3-2-0-0	(.009)	7-5-4-3-3-0-0	(.023)
10-4-4-1-1-1-1	(.006)	8-5-4-3-1-1-0	(.018)	7-5-4-3-2-1-0	(.068)
10-4-3-2-2-1-0	(.006)	8-5-4-2-2-1-0	(.026)	7-5-4-3-1-1-1	(.123)
10-4-3-2-1-1-1	(.012)	8-5-4-2-1-1-1	(.052)	7-5-4-2-2-2-0	(.095)
10-4-2-2-2-2-0	(.009)	8-5-3-3-3-0-0	(.012)	7-5-4-2-2-1-1	(.168)
10-4-2-2-2-1-1	(.018)	8-5-3-3-2-1-0	(.036)	7-5-3-3-3-1-0	(.083)
10-3-3-3-2-1-0	(.007)	8-5-3-3-1-1-1	(.068)	7-5-3-3-2-2-0	(.123)

7-4-4-4-3-0-0	(.028)	11-3-3-2-2-1-1	(.008)	8-8-2-2-1-1-1	(.007)
7-4-4-4-2-1-0	(.080)	11-3-2-2-2-2-1	(.012)	8-7-4-2-1-1-0	(.005)
7-4-4-4-1-1-1	(.153)	11-2-2-2-2-2-2	(.018)	8-7-4-1-1-1-1	(.010)
7-4-4-3-3-1-0	(.101)	10-5-3-2-1-1-1	(.009)	8-7-3-3-1-1-0	(.006)
7-4-4-3-2-2-0	(.153)	10-5-2-2-2-2-0	(.007)	8-7-3-2-2-1-0	(.010)
7-4-3-3-3-2-0	(.173)	10-5-2-2-2-1-1	(.013)	8-7-3-2-1-1-1	(.020)
6-6-6-3-1-0-0	(.005)	10-4-4-2-2-1-0	(.005)	8-7-2-2-2-2-0	(.013)
6-6-6-2-2-0-0	(.007)	10-4-4-2-1-1-1	(.012)	8-7-2-2-2-1-1	(.029)
6-6-6-2-1-1-0	(.015)	10-4-3-3-2-1-0	(.008)	8-6-5-2-1-1-0	(.007)
6-6-6-1-1-1-1	(.030)	10-4-3-3-1-1-1	(.015)	8-6-5-1-1-1-1	(.013)
6-6-5-4-1-0-0	(.007)	10-4-3-2-2-2-0	(.012)	8-6-4-3-2-0-0	(.005)
6-6-5-3-2-0-0	(.015)	10-4-3-2-2-1-1	(.025)	8-6-4-3-1-1-0	(.012)
6-6-5-3-1-1-0	(.030)	10-4-2-2-2-2-1	(.036)	8-6-4-2-2-1-0	(.017)
6-6-5-2-2-1-0	(.049)	10-3-3-3-3-1-0	(.010)	8-6-4-2-1-1-1	(.036)
6-6-5-2-1-1-1	(.090)	10-3-3-3-2-2-0	(.015)	8-6-3-3-3-0-0	(.008)
6-6-4-4-2-0-0	(.020)	10-3-3-3-2-1-1	(.029)	8-6-3-3-2-1-0	(.025)
6-6-4-4-1-1-0	(.039)	10-3-3-2-2-2-1	(.047)	8-6-3-3-1-1-1	(.047)
6-6-4-3-3-0-0	(.026)	10-3-2-2-2-2-2	(.068)	8-6-3-2-2-2-0	(.036)
6-6-4-3-2-1-0	(.074)	9-7-2-2-1-1-1	(.006)	8-6-3-2-2-1-1	(.068)
6-6-4-3-1-1-1	(.142)	9-6-4-1-1-1-1	(.008)	8-6-2-2-2-2-1	(.093)
6-6-4-2-2-2-0	(.110)	9-6-3-3-1-1-0	(.005)	8-5-5-3-2-0-0	(.007)
6-6-4-2-2-1-1	(.201)	9-6-3-2-2-1-0	(.008)	8-5-5-3-1-1-0	(.013)
6-6-3-3-3-1-0	(.096)	9-6-3-2-1-1-1	(.015)	8-5-5-2-2-1-0	(.020)
6-6-3-3-2-2-0	(.142)	9-6-2-2-2-2-0	(.012)	8-5-5-2-1-1-1	(.039)
6-5-5-5-1-0-0	(.089)	9-6-2-2-2-1-1	(.025)	8-5-4-4-2-0-0	(.008)
6-5-5-4-2-0-0	(.024)	9-5-5-1-1-1-1	(.009)	8-5-4-4-1-1-0	(.017)
6-5-5-4-1-1-0	(.049)	9-5-4-3-1-1-0	(.008)	8-5-4-3-3-0-0	(.012)
6-5-5-3-3-0-0	(.030)	9-5-4-2-2-1-0	(.012)	8-5-4-3-2-1-0	(.036)
6-5-5-3-2-1-0	(.090)	9-5-4-2-1-1-1	(.025)	8-5-4-3-1-1-1	(.068)
6-5-5-3-1-1-1	(.157)	9-5-3-3-3-0-0	(.005)	8-5-4-2-2-2-0	(.048)
6-5-5-2-2-2-0	(.127)	9-5-3-3-2-1-0	(.015)	8-5-4-2-2-1-1	(.093)
6-5-4-4-3-0-0	(.039)	9-5-3-3-1-1-1	(.029)	8-5-3-3-3-1-0	(.047)
6-5-4-4-2-1-0	(.110)	9-5-3-2-2-2-0	(.025)	8-5-3-3-2-1-1	(.122)
6-5-4-4-1-1-1	(.201)	9-5-3-2-2-1-1	(.047)	8-5-3-3-2-2-0	(.068)
6-5-4-3-3-1-0	(.142)	9-5-2-2-2-2-1	(.068)	8-5-3-2-2-2-1	(.167)
6-5-4-3-2-2-0	(.201)	9-4-4-4-1-1-0	(.009)	8-4-4-4-3-0-0	(.013)
6-4-4-4-4-0-0	(.050)	9-4-4-3-3-0-0	(.006)	8-4-4-4-2-1-0	(.039)
6-4-4-4-3-1-0	(.161)	9-4-4-3-2-1-0	(.019)	8-4-4-4-1-1-1	(.076)
5-5-5-5-2-0-0	(.028)	9-4-4-3-1-1-1	(.037)	8-4-4-3-3-1-0	(.054)
5-5-5-5-1-1-0	(.055)	9-4-4-2-2-2-0	(.028)	8-4-4-3-2-2-0	(.075)
5-5-5-4-3-0-0	(.049)	9-4-4-2-2-1-1	(.054)	8-4-4-3-2-1-1	(.144)
5-5-5-4-2-1-0	(.127)	9-4-3-3-3-1-0	(.025)	8-4-4-2-2-2-1	(.188)
5-5-5-3-3-1-0	(.157)	9-4-3-3-2-2-0	(.037)	8-4-3-3-3-2-0	(.102)
5-5-4-4-4-0-0	(.056)	9-4-3-3-2-1-1	(.070)	8-4-3-3-3-1-1	(.177)
5-5-4-4-3-1-0	(.201)	9-4-3-2-2-2-1	(.102)	8-3-3-3-3-3-0	(.123)
		9-4-2-2-2-2-2	(.144)	7-7-5-2-1-1-0	(.008)
N = 23		9-3-3-3-3-2-0	(.047)	7-7-5-1-1-1-1	(.015)
		9-3-3-3-3-1-1	(.090)	7-7-4-3-2-0-0	(.006)
11-4-2-2-2-1-1	(.005)	9-3-3-3-2-2-1	(.123)	7-7-4-3-1-1-0	(.012)
11-3-3-3-1-1-1	(.005)	9-3-3-2-2-2-2	(.177)	7-7-4-2-2-1-0	(.020)
		8-8-3-1-1-1-1	(.005)	7-7-4-2-1-1-1	(.038)

7-7-3-3-3-0-0	(.008)	6-6-5-3-1-1-1	(.107)	10-4-4-3-1-1-1	(.017)
7-7-3-3-2-1-0	(.026)	6-6-5-2-2-2-0	(.090)	10-4-4-2-2-2-0	(.012)
7-7-3-3-1-1-1	(.048)	6-6-5-2-2-1-1	(.163)	10-4-4-2-2-1-1	(.024)
7-7-3-2-2-2-0	(.038)	6-6-4-4-3-0-0	(.026)	10-4-3-3-3-1-0	(.011)
7-7-3-2-2-1-1	(.071)	6-6-4-4-2-1-0	(.073)	10-4-3-3-2-2-0	(.017)
7-7-2-2-2-2-1	(.103)	6-6-4-4-1-1-1	(.136)	10-4-3-3-2-1-1	(.031)
7-6-6-2-1-1-0	(.009)	6-6-4-3-3-1-0	(.095)	10-4-3-2-2-2-1	(.047)
7-6-6-1-1-1-1	(.018)	6-6-4-3-2-2-0	(.136)	10-4-2-2-2-2-2	(.066)
7-6-5-3-2-0-0	(.009)	6-6-3-3-3-2-0	(.169)	10-3-3-3-3-2-0	(.021)
7-6-5-3-1-1-0	(.018)	6-5-5-5-2-0-0	(.019)	10-3-3-3-3-1-1	(.039)
7-6-5-2-2-1-0	(.028)	6-5-5-5-1-1-0	(.037)	10-3-3-3-2-2-1	(.058)
7-6-5-2-1-1-1	(.052)	6-5-5-4-3-0-0	(.031)	10-3-3-2-2-2-2	(.089)
7-6-4-4-2-0-0	(.012)	6-5-5-4-2-1-0	(.090)	9-7-3-2-1-1-1	(.008)
7-6-4-4-1-1-0	(.025)	6-5-5-4-1-1-1	(.163)	9-7-2-2-2-2-0	(.007)
7-6-4-3-3-0-0	(.015)	6-5-5-3-3-1-0	(.107)	9-7-2-2-2-1-1	(.013)
7-6-4-3-2-1-0	(.047)	6-5-5-3-2-2-0	(.163)	9-6-5-1-1-1-1	(.006)
7-6-4-3-1-1-1	(.084)	6-5-4-4-4-0-0	(.038)	9-6-4-3-1-1-0	(.005)
7-6-4-2-2-2-0	(.068)	6-5-4-4-3-1-0	(.136)	9-6-4-2-2-1-0	(.008)
7-6-4-2-2-1-1	(.122)	6-5-4-4-2-2-0	(.185)	9-6-4-2-1-1-1	(.017)
7-6-3-3-3-1-0	(.055)	6-4-4-4-4-1-0	(.164)	9-6-3-3-2-1-0	(.011)
7-6-3-3-2-2-0	(.084)	5-5-5-5-3-0-0	(.037)	9-6-3-3-1-1-1	(.021)
7-6-3-3-2-1-1	(.151)	5-5-5-5-2-1-0	(.102)	9-6-3-2-2-2-0	(.017)
7-5-5-5-1-0-0	(.005)	5-5-5-5-1-1-1	(.177)	9-6-3-2-2-1-1	(.031)
7-5-5-4-2-0-0	(.013)	5-5-5-4-4-0-0	(.047)	9-6-2-2-2-2-1	(.047)
7-5-5-4-1-1-0	(.028)	5-5-5-4-3-1-0	(.163)	9-5-5-3-1-1-0	(.006)
7-5-5-3-3-0-0	(.018)	5-5-4-4-4-1-0	(.185)	9-5-5-2-2-1-0	(.010)
7-5-5-3-2-1-0	(.052)			9-5-5-2-1-1-1	(.019)
7-5-5-3-1-1-1	(.096)			9-5-4-4-1-1-0	(.008)
7-5-5-2-2-2-0	(.073)	N = 24		9-5-4-3-3-0-0	(.005)
7-5-5-2-2-1-1	(.138)			9-5-4-3-2-1-0	(.017)
7-5-4-4-3-0-0	(.025)	12-2-2-2-2-2-2	(.006)	9-5-4-3-1-1-1	(.031)
7-5-4-4-2-1-0	(.068)	11-5-2-2-2-1-1	(.005)	9-5-4-2-2-2-0	(.024)
7-5-4-4-1-1-1	(.122)	11-4-3-3-1-1-1	(.005)	9-5-4-2-2-1-1	(.047)
7-5-4-3-3-1-0	(.084)	11-4-3-2-2-1-1	(.008)	9-5-3-3-3-1-0	(.021)
7-5-4-3-2-2-0	(.122)	11-4-2-2-2-2-1	(.012)	9-5-3-3-2-2-0	(.031)
7-5-3-3-3-2-0	(.151)	11-3-3-3-2-2-0	(.005)	9-5-3-3-2-1-1	(.058)
7-4-4-4-4-0-0	(.028)	11-3-3-3-2-1-1	(.011)	9-5-3-2-2-2-1	(.089)
7-4-4-4-3-1-0	(.102)	11-3-3-2-2-2-1	(.017)	9-5-2-2-2-2-2	(.124)
7-4-4-4-2-2-0	(.144)	11-3-2-2-2-2-2	(.024)	9-4-4-4-3-0-0	(.006)
7-4-4-3-3-2-0	(.177)	10-6-3-2-1-1-1	(.006)	9-4-4-4-2-1-0	(.020)
6-6-6-4-1-0-0	(.005)	10-6-2-2-2-2-0	(.005)	9-4-4-4-1-1-1	(.038)
6-6-6-3-2-0-0	(.010)	10-6-2-2-2-1-1	(.010)	9-4-4-3-3-1-0	(.025)
6-6-6-3-1-1-0	(.021)	10-5-4-2-2-1-0	(.005)	9-4-4-3-2-2-0	(.038)
6-6-6-2-2-1-0	(.031)	10-5-4-2-1-1-1	(.010)	9-4-4-3-2-1-1	(.070)
6-6-6-2-1-1-1	(.058)	10-5-3-3-2-1-0	(.006)	9-4-4-2-2-2-1	(.102)
6-6-5-5-1-0-0	(.006)	10-5-3-3-1-1-1	(.012)	9-4-3-3-3-2-0	(.048)
6-6-5-4-2-0-0	(.015)	10-5-3-2-2-2-0	(.010)	9-4-3-3-3-1-1	(.089)
6-6-5-4-1-1-0	(.031)	10-5-3-2-2-1-1	(.019)	9-4-3-3-2-2-1	(.128)
6-6-5-3-3-0-0	(.021)	10-5-2-2-2-2-1	(.028)	9-4-3-2-2-2-2	(.177)
6-6-5-3-2-1-0	(.058)	10-4-4-3-2-1-0	(.008)	9-3-3-3-3-3-0	(.061)

9-3-3-3-3-2-1	(.158)	8-4-4-3-3-2-0	(.102)	7-5-4-3-3-2-0	(.152)
8-8-4-1-1-1-1	(.005)	8-4-4-3-3-1-1	(.177)	7-5-3-3-3-3-0	(.180)
8-8-3-2-2-1-0	(.005)	8-4-3-3-3-3-0	(.128)	7-4-4-4-4-1-0	(.102)
8-8-3-2-1-1-1	(.010)	7-7-6-2-1-1-0	(.005)	7-4-4-4-3-2-0	(.177)
8-8-2-2-2-2-0	(.007)	7-7-6-1-1-1-1	(.011)	6-6-6-4-2-0-0	(.011)
8-8-2-2-2-1-1	(.014)	7-7-5-3-2-0-0	(.005)	6-6-6-4-1-1-0	(.021)
8-7-5-1-1-1-1	(.008)	7-7-5-3-1-1-0	(.011)	6-6-6-3-3-0-0	(.014)
8-7-4-3-1-1-0	(.007)	7-7-5-2-2-1-0	(.017)	6-6-6-3-2-1-0	(.040)
8-7-4-2-2-1-0	(.010)	7-7-5-2-1-1-1	(.031)	6-6-6-3-1-1-1	(.075)
8-7-4-2-1-1-1	(.020)	7-7-4-4-2-0-0	(.007)	6-6-6-2-2-2-0	(.061)
8-7-3-3-2-1-0	(.013)	7-7-4-4-1-1-0	(.013)	6-6-6-2-2-1-1	(.113)
8-7-3-3-1-1-1	(.026)	7-7-4-3-3-0-0	(.008)	6-6-5-5-2-0-0	(.012)
8-7-3-2-2-2-0	(.020)	7-7-4-3-2-1-0	(.026)	6-6-5-5-1-1-0	(.025)
8-7-3-2-2-1-1	(.039)	7-7-4-3-1-1-1	(.049)	6-6-5-4-3-0-0	(.021)
8-7-2-2-2-2-1	(.054)	7-7-4-2-2-2-0	(.039)	6-6-5-4-2-1-0	(.061)
8-6-6-1-1-1-1	(.010)	7-7-4-2-2-1-1	(.072)	6-6-5-4-1-1-1	(.113)
8-6-5-3-1-1-0	(.010)	7-7-3-3-3-1-0	(.034)	6-6-5-3-3-1-0	(.075)
8-6-5-2-2-1-0	(.014)	7-7-3-3-2-2-0	(.049)	6-6-5-3-2-2-0	(.113)
8-6-5-2-1-1-1	(.028)	7-7-3-3-2-1-1	(.091)	6-6-5-3-2-1-1	(.191)
8-6-4-4-2-0-0	(.006)	7-7-3-2-2-2-1	(.130)	6-6-4-4-4-0-0	(.026)
8-6-4-4-1-1-0	(.012)	7-7-2-2-2-2-2	(.178)	6-6-4-4-3-1-0	(.093)
8-6-4-3-3-0-0	(.008)	7-6-6-3-2-0-0	(.006)	6-6-4-4-2-2-0	(.134)
8-6-4-3-2-1-0	(.024)	7-6-6-3-1-1-0	(.012)	6-6-4-3-3-2-0	(.166)
8-6-4-3-1-1-1	(.047)	7-6-6-2-2-1-0	(.019)	6-5-5-5-3-0-0	(.025)
8-6-4-2-2-2-0	(.033)	7-6-6-2-1-1-1	(.037)	6-5-5-5-2-1-0	(.071)
8-6-4-2-2-1-1	(.066)	7-6-5-4-2-0-0	(.010)	6-5-5-5-1-1-1	(.129)
8-6-3-3-3-1-0	(.031)	7-6-5-4-1-1-0	(.019)	6-5-5-4-4-0-0	(.031)
8-6-3-3-2-2-0	(.047)	7-6-5-3-3-0-0	(.012)	6-5-5-4-3-1-0	(.113)
8-6-3-3-2-1-1	(.089)	7-6-5-3-2-1-0	(.037)	6-5-5-4-2-2-0	(.158)
8-6-3-2-2-2-1	(.124)	7-6-5-3-1-1-1	(.068)	6-5-5-3-3-2-0	(.191)
8-6-2-2-2-2-2	(.161)	7-6-5-2-2-2-0	(.053)	6-5-4-4-4-1-0	(.134)
8-5-5-4-2-0-0	(.007)	7-6-5-2-2-1-1	(.098)	5-5-5-5-4-0-0	(.038)
8-5-5-4-1-1-0	(.014)	7-6-4-4-3-0-0	(.017)	5-5-5-5-3-1-0	(.129)
8-5-5-3-3-0-0	(.010)	7-6-4-4-2-1-0	(.047)	5-5-5-5-2-2-0	(.177)
8-5-5-3-2-1-0	(.028)	7-6-4-4-1-1-1	(.089)	5-5-5-4-4-1-0	(.158)
8-5-5-3-1-1-1	(.053)	7-6-4-3-3-1-0	(.058)		
8-5-5-2-2-2-0	(.040)	7-6-4-3-2-2-0	(.089)		
8-5-5-2-2-1-1	(.073)	7-6-4-3-2-1-1	(.152)	N = 25	
8-5-4-4-3-0-0	(.012)	7-6-3-3-3-2-0	(.104)		
8-5-4-4-2-1-0	(.033)	7-6-3-3-3-1-1	(.180)	12-3-3-2-2-2-1	(.006)
8-5-4-4-1-1-1	(.066)	7-5-5-5-2-0-0	(.011)	12-3-2-2-2-2-2	(.009)
8-5-4-3-3-1-0	(.047)	7-5-5-5-1-1-0	(.021)	11-5-3-3-1-1-1	(.005)
8-5-4-3-2-2-0	(.066)	7-5-5-4-3-0-0	(.019)	11-5-3-2-2-1-1	(.008)
8-5-4-3-2-1-1	(.124)	7-5-5-4-2-1-0	(.053)	11-5-2-2-2-2-1	(.010)
8-5-4-2-2-2-1	(.161)	7-5-5-4-1-1-1	(.098)	11-4-4-3-1-1-1	(.006)
8-5-3-3-3-2-0	(.089)	7-5-5-3-3-1-0	(.068)	11-4-4-2-2-1-1	(.009)
8-5-3-3-3-1-1	(.152)	7-5-5-3-2-2-0	(.098)	11-4-3-3-2-2-0	(.006)
8-4-4-4-4-0-0	(.014)	7-5-5-3-2-1-1	(.171)	11-4-3-3-2-1-1	(.012)
8-4-4-4-3-1-0	(.053)	7-5-4-4-4-0-0	(.024)	11-4-3-2-2-2-1	(.017)
8-4-4-4-2-2-0	(.076)	7-5-4-4-3-1-0	(.089)	11-4-2-2-2-2-2	(.026)
8-4-4-4-2-1-1	(.135)	7-5-4-4-2-2-0	(.124)	11-3-3-3-3-2-0	(.008)

11-3-3-3-3-1-1	(.016)	9-6-3-2-2-2-1	(.064)	8-6-6-2-2-1-0	(.010)
11-3-3-3-2-2-1	(.024)	9-6-2-2-2-2-2	(.091)	8-6-6-2-1-1-1	(.020)
11-3-3-2-2-2-2	(.033)	9-5-5-4-1-1-0	(.007)	8-6-5-4-2-0-0	(.005)
10-7-2-2-2-1-1	(.005)	9-5-5-3-2-1-0	(.014)	8-6-5-4-1-1-0	(.010)
10-6-4-2-1-1-1	(.007)	9-5-5-3-1-1-1	(.026)	8-6-5-3-3-0-0	(.007)
10-6-3-3-1-1-1	(.009)	9-5-5-2-2-2-0	(.020)	8-6-5-3-2-1-0	(.020)
10-6-3-2-2-2-0	(.007)	9-5-5-2-2-1-1	(.039)	8-6-5-3-1-1-1	(.039)
10-6-3-2-2-1-1	(.014)	9-5-4-4-3-0-0	(.005)	8-6-5-2-2-2-0	(.029)
10-6-2-2-2-2-1	(.020)	9-5-4-4-2-1-0	(.017)	8-6-5-2-2-1-1	(.056)
10-5-5-2-1-1-1	(.008)	9-5-4-4-1-1-1	(.033)	8-6-4-4-3-0-0	(.008)
10-5-4-3-2-1-0	(.007)	9-5-4-3-3-1-0	(.022)	8-6-4-4-2-1-0	(.024)
10-5-4-3-1-1-1	(.014)	9-5-4-3-2-2-0	(.033)	8-6-4-4-1-1-1	(.047)
10-5-4-2-2-2-0	(.010)	9-5-4-3-2-1-1	(.064)	8-6-4-3-3-1-0	(.033)
10-5-4-2-2-1-1	(.020)	9-5-4-2-2-2-1	(.091)	8-6-4-3-2-2-0	(.047)
10-5-3-3-3-1-0	(.009)	9-5-3-3-3-2-0	(.042)	8-6-4-3-2-1-1	(.091)
10-5-3-3-2-2-0	(.014)	9-5-3-3-3-1-1	(.076)	8-6-4-2-2-2-1	(.120)
10-5-3-3-2-1-1	(.026)	9-5-3-3-2-2-1	(.111)	8-6-3-3-3-2-0	(.064)
10-5-3-2-2-2-1	(.039)	9-5-3-2-2-2-2	(.159)	8-6-3-3-3-1-1	(.111)
10-5-2-2-2-2-2	(.056)	9-4-4-4-4-0-0	(.007)	8-6-3-3-2-2-1	(.159)
10-5-5-2-1-1-1	(.008)	9-4-4-4-3-1-0	(.026)	8-5-5-5-2-0-0	(.005)
10-4-4-4-2-1-0	(.008)	9-4-4-4-2-2-0	(.039)	8-5-5-5-1-1-0	(.012)
10-4-4-4-1-1-1	(.017)	9-4-4-4-2-1-1	(.074)	8-5-5-4-3-0-0	(.010)
10-4-4-3-3-1-0	(.011)	9-4-4-3-3-2-0	(.050)	8-5-5-4-2-1-0	(.029)
10-4-4-3-2-2-0	(.017)	9-4-4-3-3-1-1	(.092)	8-5-5-4-1-1-1	(.056)
10-4-4-3-2-1-1	(.033)	9-4-4-3-2-2-1	(.132)	8-5-5-3-3-1-0	(.039)
10-4-4-2-2-2-1	(.047)	9-4-4-2-2-2-2	(.177)	8-5-5-3-2-2-0	(.056)
10-4-3-3-3-2-0	(.022)	9-4-3-3-3-3-0	(.064)	8-5-5-3-2-1-1	(.101)
10-4-3-3-3-1-1	(.042)	9-4-3-3-3-2-1	(.161)	8-5-5-2-2-2-1	(.137)
10-4-3-3-2-2-1	(.064)	9-3-3-3-3-3-1	(.200)	8-5-4-4-4-0-0	(.012)
10-4-3-2-2-2-2	(.091)	8-8-4-2-2-1-0	(.005)	8-5-4-4-3-1-0	(.047)
10-3-3-3-3-3-0	(.028)	8-8-4-2-1-1-1	(.010)	8-5-4-4-2-2-0	(.066)
10-3-3-3-3-2-1	(.076)	8-8-3-3-2-1-0	(.007)	8-5-4-4-2-1-1	(.120)
10-3-3-3-2-2-2	(.111)	8-8-3-3-1-1-1	(.015)	8-5-4-3-3-2-0	(.091)
9-8-3-2-1-1-1	(.005)	8-8-3-2-2-2-0	(.010)	8-5-4-3-3-1-1	(.159)
9-8-2-2-2-1-1	(.007)	8-8-3-2-2-1-1	(.021)	8-5-3-3-3-3-0	(.111)
9-7-4-2-1-1-1	(.009)	8-8-2-2-2-2-1	(.029)	8-4-4-4-4-1-0	(.056)
9-7-3-3-2-1-0	(.006)	8-7-6-1-1-1-1	(.005)	8-4-4-4-3-2-0	(.102)
9-7-3-3-1-1-1	(.012)	8-7-5-3-1-1-0	(.005)	8-4-4-4-3-1-1	(.177)
9-7-3-2-2-2-0	(.009)	8-7-5-2-2-1-0	(.009)	8-4-4-3-3-3-0	(.132)
9-7-3-2-2-1-1	(.018)	8-7-5-2-1-1-1	(.017)	7-7-7-1-1-1-1	(.006)
9-7-2-2-2-2-1	(.028)	8-7-4-4-1-1-0	(.007)	7-7-6-3-1-1-0	(.008)
9-6-5-2-2-1-0	(.007)	8-7-4-3-2-1-0	(.015)	7-7-6-2-2-1-0	(.012)
9-6-5-2-1-1-1	(.014)	8-7-4-3-1-1-1	(.028)	7-7-6-2-1-1-1	(.023)
9-6-4-4-1-1-0	(.005)	8-7-4-2-2-2-0	(.021)	7-7-5-4-2-0-0	(.005)
9-6-4-3-2-1-0	(.011)	8-7-4-2-2-1-1	(.040)	7-7-5-4-1-1-0	(.012)
9-6-4-3-1-1-1	(.022)	8-7-3-3-3-1-0	(.018)	7-7-5-3-3-0-0	(.008)
9-6-4-2-2-2-0	(.017)	8-7-3-3-2-2-0	(.028)	7-7-5-3-2-1-0	(.023)
9-6-4-2-2-1-1	(.033)	8-7-3-3-2-1-1	(.053)	7-7-5-3-1-1-1	(.042)
9-6-3-3-3-1-0	(.015)	8-7-3-2-2-2-1	(.075)	7-7-5-2-2-2-0	(.033)
9-6-3-3-2-2-0	(.022)	8-7-2-2-2-2-2	(.102)	7-7-5-2-2-1-1	(.064)
9-6-3-3-2-1-1	(.042)	8-6-6-3-1-1-0	(.007)	7-7-4-4-3-0-0	(.009)

7-7-4-4-2-1-0	(.028)	6-6-6-3-2-2-0	(.080)	10-7-2-2-2-2-1	(.013)
7-7-4-4-1-1-1	(.053)	6-6-6-3-2-1-1	(.141)	10-6-5-2-1-1-1	(.006)
7-7-4-3-3-1-0	(.034)	6-6-6-2-2-2-1	(.200)	10-6-4-3-2-1-0	(.005)
7-7-4-3-2-2-0	(.053)	6-6-5-5-3-0-0	(.017)	10-6-4-3-1-1-1	(.010)
7-7-4-3-2-1-1	(.096)	6-6-5-5-2-1-0	(.051)	10-6-4-2-2-2-0	(.008)
7-7-4-2-2-2-1	(.135)	6-6-5-5-1-1-1	(.094)	10-6-4-2-2-1-1	(.015)
7-7-3-3-3-2-0	(.066)	6-6-5-4-4-0-0	(.023)	10-6-3-3-3-1-0	(.006)
7-7-3-3-3-1-1	(.120)	6-6-5-4-3-1-0	(.080)	10-6-3-3-2-2-0	(.010)
7-7-3-3-2-2-1	(.163)	6-6-5-4-2-2-0	(.115)	10-6-3-3-2-1-1	(.019)
7-6-6-4-2-0-0	(.007)	6-6-5-4-2-1-1	(.200)	10-6-3-2-2-2-1	(.030)
7-6-6-4-1-1-0	(.014)	6-6-5-3-3-2-0	(.141)	10-6-2-2-2-2-2	(.042)
7-6-6-3-3-0-0	(.009)	6-6-4-4-4-1-0	(.096)	10-5-5-3-2-1-0	(.006)
7-6-6-3-2-1-0	(.026)	6-6-4-4-3-2-0	(.168)	10-5-5-3-1-1-1	(.011)
7-6-6-3-1-1-1	(.049)	6-5-5-5-4-0-0	(.027)	10-5-5-2-2-2-0	(.009)
7-6-6-2-2-2-0	(.039)	6-5-5-5-3-1-0	(.094)	10-5-5-2-2-1-1	(.017)
7-6-6-2-2-1-1	(.073)	6-5-5-5-2-2-0	(.134)	10-5-4-4-2-1-0	(.008)
7-6-5-5-2-0-0	(.008)	6-5-5-4-4-1-0	(.115)	10-5-4-4-1-1-1	(.015)
7-6-5-5-1-1-0	(.016)	6-5-5-4-3-2-0	(.200)	10-5-4-3-3-1-0	(.010)
7-6-5-4-3-0-0	(.014)	5-5-5-5-5-0-0	(.033)	10-5-4-3-2-2-0	(.015)
7-6-5-4-2-1-0	(.039)	5-5-5-5-4-1-0	(.134)	10-5-4-3-2-1-1	(.030)
7-6-5-4-1-1-1	(.073)			10-5-4-2-2-2-1	(.042)
7-6-5-3-3-1-0	(.049)			10-5-3-3-3-2-0	(.019)
7-6-5-3-2-2-0	(.073)	N = 26		10-5-3-3-3-1-1	(.036)
7-6-5-3-2-1-1	(.129)			10-5-3-3-2-2-1	(.055)
7-6-5-2-2-2-1	(.174)	12-4-3-2-2-2-1	(.006)	10-5-3-2-2-2-2	(.078)
7-6-4-4-4-0-0	(.017)	12-4-2-2-2-2-2	(.010)	10-4-4-4-3-1-0	(.012)
7-6-4-4-3-1-0	(.059)	12-3-3-3-3-1-1	(.006)	10-4-4-4-2-2-0	(.018)
7-6-4-4-2-2-0	(.091)	12-3-3-3-2-2-1	(.009)	10-4-4-4-2-1-1	(.035)
7-6-4-4-2-1-1	(.159)	12-3-3-2-2-2-2	(.013)	10-4-4-3-3-2-0	(.023)
7-6-4-3-3-2-0	(.111)	11-6-3-2-2-1-1	(.005)	10-4-4-3-3-1-1	(.046)
7-6-4-3-3-1-1	(.185)	11-6-2-2-2-2-1	(.008)	10-4-4-3-2-2-1	(.067)
7-6-3-3-3-3-0	(.135)	11-5-4-3-1-1-1	(.005)	10-4-4-2-2-2-2	(.092)
7-5-5-5-3-0-0	(.016)	11-5-4-2-2-1-1	(.008)	10-4-3-3-3-3-0	(.031)
7-5-5-5-2-1-0	(.043)	11-5-3-3-2-2-0	(.005)	10-4-3-3-3-2-1	(.083)
7-5-5-5-1-1-1	(.080)	11-5-3-3-2-1-1	(.011)	10-4-3-3-2-2-2	(.121)
7-5-5-4-4-0-0	(.020)	11-5-3-2-2-2-1	(.016)	10-3-3-3-3-3-1	(.103)
7-5-5-4-3-1-0	(.073)	11-5-2-2-2-2-2	(.021)	10-3-3-3-3-2-2	(.142)
7-5-5-4-2-2-0	(.101)	11-4-4-4-1-1-1	(.006)	9-8-4-2-1-1-1	(.005)
7-5-5-4-2-1-1	(.174)	11-4-4-3-2-2-0	(.006)	9-8-3-3-1-1-1	(.007)
7-5-5-3-3-2-0	(.129)	11-4-4-3-2-1-1	(.013)	9-8-3-2-2-2-0	(.005)
7-5-4-4-4-1-0	(.091)	11-4-4-2-2-2-1	(.019)	9-8-3-2-2-1-1	(.011)
7-5-4-4-3-2-0	(.159)	11-4-3-3-3-2-0	(.009)	9-8-2-2-2-2-1	(.016)
7-5-4-3-3-3-0	(.185)	11-4-3-3-3-1-1	(.017)	9-7-5-2-1-1-1	(.008)
7-4-4-4-4-2-0	(.177)	11-4-3-3-2-2-1	(.025)	9-7-4-3-2-1-0	(.007)
6-6-6-5-2-0-0	(.009)	11-4-3-2-2-2-2	(.036)	9-7-4-3-1-1-1	(.013)
6-6-6-5-1-1-0	(.017)	11-3-3-3-3-3-0	(.011)	9-7-4-2-2-2-0	(.011)
6-6-6-4-3-0-0	(.015)	11-3-3-3-3-2-1	(.033)	9-7-4-2-2-1-1	(.020)
6-6-6-4-2-1-0	(.042)	11-3-3-3-2-2-2	(.047)	9-7-3-3-3-1-0	(.009)
6-6-6-4-1-1-1	(.080)	10-7-3-3-1-1-1	(.005)	9-7-3-3-2-2-0	(.013)
6-6-6-3-3-1-0	(.056)	10-7-3-2-2-1-1	(.008)	9-7-3-3-2-1-1	(.026)

9-7-3-2-2-2-1	(.038)	8-8-3-3-2-2-0	(.016)	8-5-5-4-2-1-1	(.107)
9-7-2-2-2-2-2	(.058)	8-8-3-3-2-1-1	(.031)	8-5-5-3-3-2-0	(.078)
9-6-6-2-2-1-0	(.005)	8-8-3-2-2-2-1	(.042)	8-5-5-3-3-1-1	(.135)
9-6-6-2-1-1-1	(.010)	8-8-2-2-2-2-2	(.061)	8-5-5-3-2-2-1	(.183)
9-6-5-4-1-1-0	(.005)	8-7-6-2-2-1-0	(.006)	8-5-4-4-4-1-0	(.048)
9-6-5-3-2-1-0	(.010)	8-7-6-2-1-1-1	(.013)	8-5-4-4-3-2-0	(.092)
9-6-5-3-1-1-1	(.019)	8-7-5-4-1-1-0	(.006)	8-5-4-4-3-1-1	(.162)
9-6-5-2-2-2-0	(.015)	8-7-5-3-2-1-0	(.013)	8-5-4-3-3-3-0	(.121)
9-6-5-2-2-1-1	(.030)	8-7-5-3-1-1-1	(.025)	8-4-4-4-4-2-0	(.108)
9-6-4-4-2-1-0	(.012)	8-7-5-2-2-2-0	(.018)	8-4-4-4-4-1-1	(.186)
9-6-4-4-1-1-1	(.023)	8-7-5-2-2-1-1	(.036)	8-4-4-4-3-3-0	(.137)
9-6-4-3-3-1-0	(.017)	8-7-4-4-3-0-0	(.005)	7-7-7-2-2-1-0	(.007)
9-6-4-3-2-2-0	(.023)	8-7-4-4-2-1-0	(.016)	7-7-7-2-1-1-1	(.013)
9-6-4-3-2-1-1	(.046)	8-7-4-4-1-1-1	(.031)	7-7-6-4-1-1-0	(.008)
9-6-4-2-2-2-1	(.067)	8-7-4-3-3-1-0	(.020)	7-7-6-3-3-0-0	(.005)
9-6-3-3-3-2-0	(.031)	8-7-4-3-2-2-0	(.031)	7-7-6-3-2-1-0	(.017)
9-6-3-3-3-1-1	(.058)	8-7-4-3-2-1-1	(.058)	7-7-6-3-1-1-1	(.032)
9-6-3-3-2-2-1	(.083)	8-7-4-2-2-2-1	(.079)	7-7-6-2-2-2-0	(.025)
9-6-3-2-2-2-2	(.121)	8-7-3-3-3-2-0	(.038)	7-7-6-2-2-1-1	(.047)
9-5-5-5-1-1-0	(.006)	8-7-3-3-3-1-1	(.070)	7-7-5-5-2-0-0	(.005)
9-5-5-4-2-1-0	(.015)	8-7-3-3-2-2-1	(.103)	7-7-5-5-1-1-0	(.010)
9-5-5-4-1-1-1	(.030)	8-7-3-2-2-2-2	(.138)	7-7-5-4-3-0-0	(.008)
9-5-5-3-3-1-0	(.019)	8-6-6-4-1-1-0	(.008)	7-7-5-4-2-1-0	(.025)
9-5-5-3-2-2-0	(.030)	8-6-6-3-2-1-0	(.015)	7-7-5-4-1-1-1	(.047)
9-5-5-3-2-1-1	(.055)	8-6-6-3-1-1-1	(.030)	7-7-5-3-3-1-0	(.032)
9-5-5-2-2-2-1	(.078)	8-6-6-2-2-2-0	(.021)	7-7-5-3-2-2-0	(.047)
9-5-4-4-4-0-0	(.006)	8-6-6-2-2-1-1	(.042)	7-7-5-3-2-1-1	(.085)
9-5-4-4-3-1-0	(.023)	8-6-5-5-1-1-0	(.009)	7-7-5-2-2-2-1	(.122)
9-5-4-4-2-2-0	(.035)	8-6-5-4-3-0-0	(.008)	7-7-4-4-4-0-0	(.011)
9-5-4-4-2-1-1	(.067)	8-6-5-4-2-1-0	(.021)	7-7-4-4-3-1-0	(.038)
9-5-4-3-3-2-0	(.046)	8-6-5-4-1-1-1	(.042)	7-7-4-4-2-2-0	(.058)
9-5-4-3-3-1-1	(.083)	8-6-5-3-3-1-0	(.030)	7-7-4-4-2-1-1	(.103)
9-5-4-3-2-2-1	(.121)	8-6-5-3-2-2-0	(.042)	7-7-4-3-3-2-0	(.070)
9-5-4-2-2-2-2	(.162)	8-6-5-3-2-1-1	(.078)	7-7-4-3-3-1-1	(.123)
9-5-3-3-3-3-0	(.058)	8-6-5-2-2-2-1	(.107)	7-7-4-3-2-2-1	(.178)
9-5-3-3-3-2-1	(.142)	8-6-4-4-4-0-0	(.009)	7-7-3-3-3-3-0	(.093)
9-5-3-3-2-2-2	(.199)	8-6-4-4-3-1-0	(.035)	7-6-6-5-2-0-0	(.006)
9-4-4-4-4-1-0	(.030)	8-6-4-4-2-2-0	(.048)	7-6-6-5-1-1-0	(.011)
9-4-4-4-3-2-0	(.055)	8-6-4-4-2-1-1	(.092)	7-6-6-4-3-0-0	(.010)
9-4-4-4-3-1-1	(.098)	8-6-4-3-3-2-0	(.067)	7-6-6-4-2-1-0	(.030)
9-4-4-4-2-2-1	(.137)	8-6-4-3-3-1-1	(.121)	7-6-6-4-1-1-1	(.055)
9-4-4-3-3-3-0	(.067)	8-6-4-3-2-2-1	(.162)	7-6-6-3-3-1-0	(.036)
9-4-4-3-3-2-1	(.170)	8-6-3-3-3-3-0	(.083)	7-6-6-3-2-2-0	(.055)
9-4-3-3-3-3-1	(.204)	8-6-3-3-3-2-1	(.199)	7-6-6-3-2-1-1	(.098)
8-8-5-2-1-1-1	(.009)	8-5-5-5-3-0-0	(.009)	7-6-6-2-2-2-1	(.135)
8-8-4-3-2-1-0	(.008)	8-5-5-5-2-1-0	(.025)	7-6-5-5-3-0-0	(.011)
8-8-4-3-1-1-1	(.016)	8-5-5-5-1-1-1	(.047)	7-6-5-5-2-1-0	(.033)
8-8-4-2-2-2-0	(.011)	8-5-5-4-4-0-0	(.011)	7-6-5-5-1-1-1	(.061)
8-8-4-2-2-1-1	(.021)	8-5-5-4-3-1-0	(.042)	7-6-5-4-4-0-0	(.015)
8-8-3-3-3-1-0	(.011)	8-5-5-4-2-2-0	(.059)	7-6-5-4-3-1-0	(.055)

7-6-5-4-2-2-0	(.078)	12-4-3-3-3-1-1	(.007)	10-6-4-3-2-1-1	(.022)
7-6-5-4-2-1-1	(.135)	12-4-3-3-2-2-1	(.010)	10-6-4-2-2-2-1	(.032)
7-6-5-3-3-2-0	(.098)	12-4-3-2-2-2-2	(.015)	10-6-3-3-3-2-0	(.015)
7-6-5-3-3-1-1	(.167)	12-3-3-3-3-3-0	(.005)	10-6-3-3-3-1-1	(.028)
7-6-4-4-4-1-0	(.067)	12-3-3-3-3-2-1	(.013)	10-6-3-3-2-2-1	(.041)
7-6-4-4-3-2-0	(.121)	12-3-3-3-2-2-2	(.019)	10-6-3-2-2-2-2	(.062)
7-6-4-4-3-1-1	(.199)	11-7-2-2-2-2-1	(.005)	10-5-5-4-2-1-0	(.007)
7-6-4-3-3-3-0	(.142)	11-6-4-2-2-1-1	(.006)	10-5-5-4-1-1-1	(.013)
7-5-5-5-4-0-0	(.017)	11-6-3-3-2-1-1	(.008)	10-5-5-3-3-1-0	(.009)
7-5-5-5-3-1-0	(.061)	11-6-3-2-2-2-1	(.012)	10-5-5-3-2-2-0	(.013)
7-5-5-5-2-2-0	(.087)	11-6-2-2-2-2-2	(.017)	10-5-5-3-2-1-1	(.025)
7-5-5-5-2-1-1	(.150)	11-5-5-3-1-1-1	(.005)	10-5-5-2-2-2-1	(.037)
7-5-5-4-4-1-0	(.078)	11-5-5-2-2-1-1	(.007)	10-5-4-4-3-1-0	(.012)
7-5-5-4-3-2-0	(.135)	11-5-4-4-1-1-1	(.006)	10-5-4-4-2-2-0	(.016)
7-5-5-3-3-3-0	(.167)	11-5-4-3-2-2-0	(.006)	10-5-4-4-2-1-1	(.032)
7-5-4-4-4-2-0	(.162)	11-5-4-3-2-1-1	(.012)	10-5-4-3-3-2-0	(.022)
7-5-4-4-3-3-0	(.199)	11-5-4-2-2-2-1	(.017)	10-5-4-3-3-1-1	(.041)
6-6-6-6-2-0-0	(.006)	11-5-3-3-3-2-0	(.008)	10-5-4-3-2-2-1	(.062)
6-6-6-6-1-1-0	(.013)	11-5-3-3-3-1-1	(.016)	10-5-4-2-2-2-2	(.084)
6-6-6-5-3-0-0	(.013)	11-5-3-3-2-2-1	(.024)	10-5-3-3-3-3-0	(.028)
6-6-6-5-2-1-0	(.037)	11-5-3-2-2-2-2	(.033)	10-5-3-3-3-2-1	(.074)
6-6-6-5-1-1-1	(.068)	11-4-4-4-3-1-0	(.005)	10-5-3-3-2-2-2	(.108)
6-6-6-4-4-0-0	(.017)	11-4-4-4-2-2-0	(.008)	10-4-4-4-4-1-0	(.013)
6-6-6-4-3-1-0	(.060)	11-4-4-4-2-1-1	(.015)	10-4-4-4-3-2-0	(.026)
6-6-6-4-2-2-0	(.087)	11-4-4-3-3-2-0	(.010)	10-4-4-4-3-1-1	(.049)
6-6-6-4-2-1-1	(.149)	11-4-4-3-3-1-1	(.019)	10-4-4-4-2-2-1	(.071)
6-6-6-3-3-2-0	(.107)	11-4-4-3-2-2-1	(.028)	10-4-4-3-3-3-0	(.034)
6-6-6-3-3-1-1	(.186)	11-4-4-2-2-2-2	(.041)	10-4-4-3-3-2-1	(.091)
6-6-5-5-4-0-0	(.019)	11-4-3-3-3-3-0	(.013)	10-4-4-3-2-2-2	(.127)
6-6-5-5-3-1-0	(.068)	11-4-3-3-3-2-1	(.037)	10-4-3-3-3-3-1	(.113)
6-6-5-5-2-2-0	(.100)	11-4-3-3-2-2-2	(.052)	10-4-3-3-3-2-2	(.152)
6-6-5-5-2-1-1	(.175)	11-3-3-3-3-3-1	(.047)	10-3-3-3-3-3-2	(.189)
6-6-5-4-4-1-0	(.087)	11-3-3-3-3-2-2	(.069)	9-9-3-2-2-1-1	(.005)
6-6-5-4-3-2-0	(.149)	10-8-3-2-2-1-1	(.005)	9-9-2-2-2-2-1	(.008)
6-6-5-3-3-3-0	(.186)	10-8-2-2-2-2-1	(.007)	9-8-5-2-1-1-1	(.005)
6-6-4-4-4-2-0	(.180)	10-7-4-3-1-1-1	(.006)	9-8-4-3-1-1-1	(.008)
6-5-5-5-5-0-0	(.023)	10-7-4-2-2-2-0	(.005)	9-8-4-2-2-2-0	(.006)
6-5-5-5-4-1-0	(.100)	10-7-4-2-2-1-1	(.010)	9-8-4-2-2-1-1	(.012)
6-5-5-5-3-2-0	(.175)	10-7-3-3-2-2-0	(.006)	9-8-3-3-3-1-0	(.005)
6-5-5-4-4-2-0	(.203)	10-7-3-3-2-1-1	(.012)	9-8-3-3-2-2-0	(.008)
5-5-5-5-5-1-0	(.121)	10-7-3-2-2-2-1	(.019)	9-8-3-3-2-1-1	(.015)
		10-7-2-2-2-2-2	(.027)	9-8-3-2-2-2-1	(.024)
		10-6-6-2-1-1-1	(.005)	9-8-2-2-2-2-2	(.033)
N = 27		10-6-5-3-1-1-1	(.009)	9-7-6-2-1-1-1	(.006)
		10-6-5-2-2-2-0	(.007)	9-7-5-3-2-1-0	(.006)
13-3-3-2-2-2-2	(.005)	10-6-5-2-2-1-1	(.013)	9-7-5-3-1-1-1	(.012)
12-5-3-2-2-2-1	(.006)	10-6-4-4-2-1-0	(.005)	9-7-5-2-2-2-0	(.010)
12-5-2-2-2-2-2	(.009)	10-6-4-4-1-1-1	(.012)	9-7-5-2-2-1-1	(.019)
12-4-4-3-2-1-1	(.005)	10-6-4-3-3-1-0	(.007)	9-7-4-4-2-1-0	(.008)
12-4-4-2-2-2-1	(.008)	10-6-4-3-2-2-0	(.012)	9-7-4-4-1-1-1	(.015)

9-7-4-3-3-1-0	(.010)	9-4-4-4-3-2-1	(.183)	8-6-5-5-3-0-0	(.007)
9-7-4-3-2-2-0	(.015)	8-8-6-2-1-1-1	(.007)	8-6-5-5-2-1-0	(.019)
9-7-4-3-2-1-1	(.029)	8-8-5-3-2-1-0	(.007)	8-6-5-5-1-1-1	(.037)
9-7-4-2-2-2-1	(.043)	8-8-5-3-1-1-1	(.014)	8-6-5-4-4-0-0	(.008)
9-7-3-3-3-2-0	(.019)	8-8-5-2-2-2-0	(.010)	8-6-5-4-3-1-0	(.032)
9-7-3-3-3-1-1	(.037)	8-8-5-2-2-1-1	(.020)	8-6-5-4-2-2-0	(.045)
9-7-3-3-2-2-1	(.054)	8-8-4-4-2-1-0	(.009)	8-6-5-4-2-1-1	(.084)
9-7-3-2-2-2-2	(.079)	8-8-4-4-1-1-1	(.016)	8-6-5-3-3-2-0	(.062)
9-6-6-3-2-1-0	(.007)	8-8-4-3-3-1-0	(.012)	8-6-5-3-3-1-1	(.108)
9-6-6-3-1-1-1	(.015)	8-8-4-3-2-2-0	(.016)	8-6-5-3-2-2-1	(.146)
9-6-6-2-2-2-0	(.012)	8-8-4-3-2-1-1	(.033)	8-6-5-2-2-2-2	(.193)
9-6-6-2-2-1-1	(.022)	8-8-4-2-2-2-1	(.047)	8-6-4-4-4-1-0	(.037)
9-6-5-4-2-1-0	(.012)	8-8-3-3-3-2-0	(.024)	8-6-4-4-3-2-0	(.071)
9-6-5-4-1-1-1	(.022)	8-8-3-3-3-1-1	(.043)	8-6-4-4-3-1-1	(.127)
9-6-5-3-3-1-0	(.015)	8-8-3-3-2-2-1	(.063)	8-6-4-4-2-2-1	(.167)
9-6-5-3-2-2-0	(.022)	8-8-3-2-2-2-2	(.085)	8-6-4-3-3-3-0	(.091)
9-6-5-3-2-1-1	(.041)	8-7-7-2-1-1-1	(.008)	8-5-5-5-4-0-0	(.010)
9-6-5-2-2-2-1	(.062)	8-7-6-4-1-1-0	(.005)	8-5-5-5-3-1-0	(.037)
9-6-4-4-4-0-0	(.005)	8-7-6-3-2-1-0	(.010)	8-5-5-5-2-2-0	(.052)
9-6-4-4-3-1-0	(.017)	8-7-6-3-1-1-1	(.019)	8-5-5-5-2-1-1	(.094)
9-6-4-4-2-2-0	(.026)	8-7-6-2-2-2-0	(.014)	8-5-5-4-4-1-0	(.045)
9-6-4-4-2-1-1	(.049)	8-7-6-2-2-1-1	(.027)	8-5-5-4-3-2-0	(.084)
9-6-4-3-3-2-0	(.034)	8-7-5-5-1-1-0	(.005)	8-5-5-4-3-1-1	(.146)
9-6-4-3-3-1-1	(.065)	8-7-5-4-3-0-0	(.005)	8-5-5-4-2-2-1	(.193)
9-6-4-3-2-2-1	(.091)	8-7-5-4-2-1-0	(.014)	8-5-5-3-3-3-0	(.108)
9-6-4-2-2-2-2	(.127)	8-7-5-4-1-1-1	(.027)	8-5-4-4-4-2-0	(.095)
9-6-3-3-3-3-0	(.043)	8-7-5-3-3-1-0	(.019)	8-5-4-4-4-1-1	(.164)
9-6-3-3-3-2-1	(.113)	8-7-5-3-2-2-0	(.027)	8-5-4-4-3-3-0	(.127)
9-6-3-3-2-2-2	(.151)	8-7-5-3-2-1-1	(.052)	8-4-4-4-4-3-0	(.147)
9-5-5-5-2-1-0	(.013)	8-7-5-2-2-2-1	(.072)	7-7-7-4-1-1-0	(.005)
9-5-5-5-1-1-1	(.025)	8-7-4-4-4-0-0	(.006)	7-7-7-3-2-1-0	(.010)
9-5-5-4-4-0-0	(.005)	8-7-4-4-3-1-0	(.024)	7-7-7-3-1-1-1	(.020)
9-5-5-4-3-1-0	(.022)	8-7-4-4-2-2-0	(.033)	7-7-7-2-2-2-0	(.016)
9-5-5-4-2-2-0	(.032)	8-7-4-4-2-1-1	(.063)	7-7-7-2-2-1-1	(.029)
9-5-5-4-2-1-1	(.062)	8-7-4-3-3-2-0	(.043)	7-7-6-5-1-1-0	(.008)
9-5-5-3-3-2-0	(.041)	8-7-4-3-3-1-1	(.079)	7-7-6-4-3-0-0	(.006)
9-5-5-3-3-1-1	(.074)	8-7-4-3-2-2-1	(.112)	7-7-6-4-2-1-0	(.019)
9-5-5-3-2-2-1	(.108)	8-7-4-2-2-2-2	(.147)	7-7-6-4-1-1-1	(.036)
9-5-5-2-2-2-2	(.146)	8-7-3-3-3-3-0	(.054)	7-7-6-3-3-1-0	(.024)
9-5-4-4-4-1-0	(.026)	8-7-3-3-3-2-1	(.136)	7-7-6-3-2-2-0	(.036)
9-5-4-4-3-2-0	(.049)	8-7-3-3-2-2-2	(.188)	7-7-6-3-2-1-1	(.067)
9-5-4-4-3-1-1	(.091)	8-6-6-5-1-1-0	(.007)	7-7-6-2-2-2-1	(.093)
9-5-4-4-2-2-1	(.127)	8-6-6-4-3-0-0	(.005)	7-7-5-5-3-0-0	(.008)
9-5-4-3-3-3-0	(.065)	8-6-6-4-2-1-0	(.016)	7-7-5-5-2-1-0	(.023)
9-5-4-3-3-2-1	(.157)	8-6-6-4-1-1-1	(.032)	7-7-5-5-1-1-1	(.041)
9-5-3-3-3-3-1	(.189)	8-6-6-3-3-1-0	(.022)	7-7-5-4-4-0-0	(.010)
9-4-4-4-4-2-0	(.062)	8-6-6-3-2-2-0	(.032)	7-7-5-4-3-1-0	(.036)
9-4-4-4-4-1-1	(.108)	8-6-6-3-2-1-1	(.062)	7-7-5-4-2-2-0	(.052)
9-4-4-4-3-3-0	(.075)	8-6-6-2-2-2-1	(.084)	7-7-5-4-2-1-1	(.093)

7-7-5-3-3-1-1	(.114)	6-6-5-4-3-3-0	(.199)	11-5-3-3-2-2-2	(.051)
7-7-5-3-3-2-0	(.067)	6-5-5-5-5-1-0	(.091)	11-4-4-4-4-1-0	(.006)
7-7-5-3-2-2-1	(.160)	6-5-5-5-4-2-0	(.185)	11-4-4-4-3-1-1	(.022)
7-7-4-4-4-1-0	(.043)			11-4-4-4-3-2-0	(.012)
7-7-4-4-3-2-0	(.079)			11-4-4-4-2-2-1	(.033)
7-7-4-4-3-1-1	(.136)	N = 28		11-4-4-3-3-3-0	(.015)
7-7-4-4-2-2-1	(.188)			11-4-4-3-3-2-1	(.042)
7-7-4-3-3-3-0	(.095)	13-4-3-2-2-2-2	(.005)	11-4-4-3-2-2-2	(.059)
7-6-6-6-1-1-0	(.009)	13-3-3-3-3-2-1	(.005)	11-4-3-3-3-3-1	(.055)
7-6-6-5-3-0-0	(.009)	13-3-3-3-2-2-2	(.007)	11-4-3-3-3-2-2	(.076)
7-6-6-5-2-1-0	(.025)	12-6-3-2-2-2-1	(.005)	11-3-3-3-3-3-2	(.096)
7-6-6-5-1-1-1	(.047)	12-6-2-2-2-2-2	(.007)	10-8-4-2-2-1-1	(.006)
7-6-6-4-4-0-0	(.012)	12-5-4-3-2-1-1	(.005)	10-8-3-3-2-1-1	(.008)
7-6-6-4-3-1-0	(.041)	12-5-4-2-2-2-1	(.007)	10-8-3-2-2-2-1	(.011)
7-6-6-4-2-2-0	(.062)	12-5-3-3-3-1-1	(.006)	10-8-2-2-2-2-2	(.016)
7-6-6-4-2-1-1	(.108)	12-5-3-3-2-2-1	(.009)	10-7-5-3-1-1-1	(.006)
7-6-6-3-3-2-0	(.074)	12-5-3-2-2-2-2	(.013)	10-7-5-2-2-1-1	(.009)
7-6-6-3-3-1-1	(.130)	12-4-4-4-2-1-1	(.006)	10-7-4-4-1-1-1	(.008)
7-6-6-3-2-2-1	(.181)	12-4-4-3-3-1-1	(.008)	10-7-4-3-3-1-0	(.005)
7-6-5-5-4-0-0	(.013)	12-4-4-3-2-2-1	(.012)	10-7-4-3-2-2-0	(.008)
7-6-5-5-3-1-0	(.047)	12-4-4-2-2-2-2	(.017)	10-7-4-3-2-1-1	(.015)
7-6-5-5-2-2-0	(.069)	12-4-3-3-3-3-0	(.005)	10-7-4-2-2-2-1	(.022)
7-6-5-5-2-1-1	(.119)	12-4-3-3-3-2-1	(.015)	10-7-3-3-3-2-0	(.010)
7-6-5-4-4-1-0	(.062)	12-4-3-3-2-2-2	(.022)	10-7-3-3-3-1-1	(.019)
7-6-5-4-3-2-0	(.108)	12-3-3-3-3-3-1	(.020)	10-7-3-3-2-2-1	(.028)
7-6-5-4-3-1-1	(.181)	12-3-3-3-3-2-2	(.029)	10-7-3-2-2-2-2	(.041)
7-6-5-3-3-3-0	(.130)	11-7-3-3-2-1-1	(.005)	10-6-6-3-1-1-1	(.007)
7-6-4-4-4-2-0	(.127)	11-7-3-2-2-2-1	(.008)	10-6-6-2-2-2-0	(.005)
7-6-4-4-3-3-0	(.150)	11-7-2-2-2-2-2	(.012)	10-6-6-2-2-1-1	(.011)
7-5-5-5-5-0-0	(.016)	11-6-5-2-2-1-1	(.006)	10-6-5-4-2-1-0	(.005)
7-5-5-5-4-1-0	(.069)	11-6-4-4-1-1-1	(.005)	10-6-5-4-1-1-1	(.011)
7-5-5-5-3-2-0	(.119)	11-6-4-3-2-2-0	(.005)	10-6-5-3-3-1-0	(.007)
7-5-5-5-3-1-1	(.200)	11-6-4-3-2-1-1	(.009)	10-6-5-3-2-2-0	(.011)
7-5-5-4-4-2-0	(.146)	11-6-4-2-2-2-1	(.013)	10-6-5-3-2-1-1	(.020)
7-5-5-4-3-3-0	(.181)	11-6-3-3-3-2-0	(.006)	10-6-5-2-2-2-1	(.029)
6-6-6-6-3-0-0	(.010)	11-6-3-3-3-1-1	(.012)	10-6-4-4-3-1-0	(.008)
6-6-6-6-2-1-0	(.028)	11-6-3-3-2-2-1	(.019)	10-6-4-4-2-2-0	(.013)
6-6-6-6-1-1-1	(.053)	11-6-3-2-2-2-2	(.026)	10-6-4-4-2-1-1	(.025)
6-6-6-5-4-0-0	(.015)	11-5-5-4-1-1-1	(.006)	10-6-4-3-3-2-0	(.017)
6-6-6-5-3-1-0	(.053)	11-5-5-3-2-2-0	(.006)	10-6-4-3-3-1-1	(.032)
6-6-6-5-2-2-0	(.076)	11-5-5-3-2-1-1	(.012)	10-6-4-3-2-2-1	(.049)
6-6-6-5-2-1-1	(.133)	11-5-5-2-2-2-1	(.016)	10-6-4-2-2-2-2	(.067)
6-6-6-4-4-1-0	(.067)	11-5-4-4-2-2-0	(.007)	10-6-3-3-3-3-0	(.022)
6-6-6-4-3-2-0	(.115)	11-5-4-4-2-1-1	(.013)	10-6-3-3-3-2-1	(.059)
6-6-6-4-3-1-1	(.199)	11-5-4-3-3-2-0	(.009)	10-6-3-3-2-2-2	(.087)
6-6-6-3-3-3-0	(.146)	11-5-4-3-3-1-1	(.019)	10-5-5-5-2-1-0	(.006)
6-6-5-5-5-0-0	(.019)	11-5-4-3-2-2-1	(.026)	10-5-5-5-1-1-1	(.012)
6-6-5-5-4-1-0	(.076)	11-5-4-2-2-2-2	(.037)	10-5-5-4-3-1-0	(.011)
6-6-5-5-3-2-0	(.133)	11-5-3-3-3-3-0	(.012)	10-5-5-4-2-2-0	(.015)
6-6-5-4-4-2-0	(.163)	11-5-3-3-3-2-1	(.034)	10-5-5-4-2-1-1	(.029)

10-5-5-3-3-2-0	(.020)	9-7-4-3-3-1-1	(.043)	8-8-6-2-2-1-1	(.016)
10-5-5-3-3-1-1	(.037)	9-7-4-3-2-2-1	(.062)	8-8-5-4-2-1-0	(.008)
10-5-5-3-2-2-1	(.055)	9-7-4-2-2-2-2	(.090)	8-8-5-4-1-1-1	(.016)
10-5-5-2-2-2-2	(.076)	9-7-3-3-3-3-0	(.030)	8-8-5-3-3-1-0	(.011)
10-5-4-4-4-1-0	(.013)	9-7-3-3-3-2-1	(.077)	8-8-5-3-2-2-0	(.016)
10-5-4-4-3-2-0	(.025)	9-7-3-3-2-2-2	(.106)	8-8-5-3-2-1-1	(.031)
10-5-4-4-3-1-1	(.049)	9-6-6-4-2-1-0	(.008)	8-8-5-2-2-2-1	(.043)
10-5-4-4-2-2-1	(.067)	9-6-6-4-1-1-1	(.017)	8-8-4-4-3-1-0	(.013)
10-5-4-3-3-3-0	(.032)	9-6-6-3-3-1-0	(.012)	8-8-4-4-2-2-0	(.020)
10-5-4-3-3-2-1	(.087)	9-6-6-3-2-2-0	(.017)	8-8-4-4-2-1-1	(.037)
10-5-4-3-2-2-2	(.119)	9-6-6-3-2-1-1	(.032)	8-8-4-3-3-2-0	(.026)
10-5-3-3-3-3-1	(.104)	9-6-6-2-2-2-1	(.049)	8-8-4-3-3-1-1	(.051)
10-5-3-3-3-2-2	(.145)	9-6-5-5-2-1-0	(.011)	8-8-4-3-2-2-1	(.068)
10-4-4-4-4-2-0	(.030)	9-6-5-5-1-1-1	(.020)	8-8-4-2-2-2-2	(.096)
10-4-4-4-4-1-1	(.055)	9-6-5-4-3-1-0	(.017)	8-8-3-3-3-3-0	(.034)
10-4-4-4-3-3-0	(.038)	9-6-5-4-2-2-0	(.025)	8-8-3-3-3-2-1	(.090)
10-4-4-4-3-2-1	(.100)	9-6-5-4-2-1-1	(.049)	8-8-3-3-2-2-2	(.122)
10-4-4-4-2-2-2	(.135)	9-6-5-3-3-2-0	(.032)	8-7-7-3-2-1-0	(.006)
10-4-4-3-3-3-1	(.126)	9-6-5-3-3-1-1	(.059)	8-7-7-3-1-1-1	(.013)
10-4-4-3-3-2-2	(.174)	9-6-5-3-2-2-1	(.087)	8-7-7-2-2-2-0	(.009)
9-9-4-2-2-1-1	(.006)	9-6-5-2-2-2-2	(.119)	8-7-7-2-2-1-1	(.019)
9-9-3-3-2-1-1	(.008)	9-6-4-4-4-1-0	(.020)	8-7-6-4-2-1-0	(.011)
9-9-3-2-2-2-1	(.012)	9-6-4-4-3-2-0	(.038)	8-7-6-4-1-1-1	(.022)
9-9-2-2-2-2-2	(.018)	9-6-4-4-3-1-1	(.070)	8-7-6-3-3-1-0	(.015)
9-8-5-3-1-1-1	(.008)	9-6-4-4-2-2-1	(.100)	8-7-6-3-2-2-0	(.022)
9-8-5-2-2-2-0	(.006)	9-6-4-3-2-2-2	(.174)	8-7-6-3-2-1-1	(.041)
9-8-5-2-2-1-1	(.011)	9-6-4-3-3-3-0	(.051)	8-7-6-2-2-2-1	(.057)
9-8-4-4-1-1-1	(.009)	9-6-4-3-3-2-1	(.126)	8-7-5-5-2-1-0	(.013)
9-8-4-3-3-1-0	(.006)	9-6-3-3-3-3-1	(.152)	8-7-5-5-1-1-1	(.025)
9-8-4-3-2-2-0	(.009)	9-5-5-5-4-0-0	(.005)	8-7-5-4-4-0-0	(.006)
9-8-4-3-2-1-1	(.018)	9-5-5-5-3-1-0	(.020)	8-7-5-4-3-1-0	(.022)
9-8-4-2-2-2-1	(.026)	9-5-5-5-2-2-0	(.029)	8-7-5-4-2-2-0	(.031)
9-8-3-3-3-2-0	(.012)	9-5-5-5-2-1-1	(.055)	8-7-5-4-2-1-1	(.057)
9-8-3-3-3-1-1	(.023)	9-5-5-4-4-1-0	(.025)	8-7-5-3-3-2-0	(.041)
9-8-3-3-2-2-1	(.034)	9-5-5-4-3-2-0	(.049)	8-7-5-3-3-1-1	(.074)
9-8-3-2-2-2-2	(.051)	9-5-5-4-3-1-1	(.087)	8-7-5-3-2-2-1	(.103)
9-7-6-3-2-1-0	(.005)	9-5-5-4-2-2-1	(.119)	8-7-5-2-2-2-2	(.135)
9-7-6-3-1-1-1	(.010)	9-5-5-3-3-3-0	(.059)	8-7-4-4-4-1-0	(.026)
9-7-6-2-2-2-0	(.008)	9-5-5-3-3-2-1	(.145)	8-7-4-4-3-2-0	(.051)
9-7-6-2-2-1-1	(.015)	9-5-5-3-2-2-2	(.199)	8-7-4-4-3-1-1	(.090)
9-7-5-4-2-1-0	(.008)	9-5-4-4-4-2-0	(.055)	8-7-4-4-2-2-1	(.122)
9-7-5-4-1-1-1	(.015)	9-5-4-4-4-1-1	(.100)	8-7-4-3-3-3-0	(.062)
9-7-5-3-3-1-0	(.010)	9-5-4-4-3-3-0	(.070)	8-7-4-3-3-2-1	(.152)
9-7-5-3-2-2-0	(.015)	9-5-4-4-3-2-1	(.174)	8-7-4-3-2-2-2	(.202)
9-7-5-3-2-1-1	(.028)	9-4-4-4-4-3-0	(.087)	8-7-3-3-3-3-1	(.182)
9-7-5-2-2-2-1	(.041)	9-4-4-4-4-2-1	(.200)	8-6-6-6-1-1-0	(.005)
9-7-4-4-3-1-0	(.012)	8-8-7-2-1-1-1	(.005)	8-6-6-5-3-0-0	(.005)
9-7-4-4-2-2-0	(.018)	8-8-6-3-2-1-0	(.006)	8-6-6-5-2-1-0	(.015)
9-7-4-4-2-1-1	(.034)	8-8-6-3-1-1-1	(.011)	8-6-6-5-1-1-1	(.029)
9-7-4-3-3-2-0	(.023)	8-8-6-2-2-2-0	(.008)	8-6-6-4-4-0-0	(.007)

8-6-6-4-3-1-0	(.025)	7-7-7-3-3-1-0	(.016)	7-6-6-5-2-2-0	(.055)
8-6-6-4-2-2-0	(.035)	7-7-7-3-2-2-0	(.023)	7-6-6-5-2-1-1	(.096)
8-6-6-4-2-1-1	(.067)	7-7-7-3-2-1-1	(.043)	7-6-6-4-4-1-0	(.049)
8-6-6-3-3-2-0	(.049)	7-7-7-2-2-2-1	(.062)	7-6-6-4-3-2-0	(.087)
8-6-6-3-3-1-1	(.087)	7-7-6-6-1-1-0	(.006)	7-6-6-4-3-1-1	(.145)
8-6-6-3-2-2-1	(.119)	7-7-6-5-3-0-0	(.006)	7-6-6-4-2-2-1	(.199)
8-6-6-2-2-2-2	(.159)	7-7-6-5-2-1-0	(.018)	7-6-6-3-3-3-0	(.104)
8-6-5-5-4-0-0	(.008)	7-7-6-5-1-1-1	(.033)	7-6-5-5-5-0-0	(.012)
8-6-5-5-3-1-0	(.029)	7-7-6-4-4-0-0	(.008)	7-6-5-5-4-1-0	(.055)
8-6-5-5-2-2-0	(.042)	7-7-6-4-3-1-0	(.028)	7-6-5-5-3-2-0	(.096)
8-6-5-5-2-1-1	(.076)	7-7-6-4-2-2-0	(.041)	7-6-5-5-3-1-1	(.163)
8-6-5-4-4-1-0	(.035)	7-7-6-4-2-1-1	(.074)	7-6-5-4-4-2-0	(.119)
8-6-5-4-3-2-0	(.067)	7-7-6-3-3-2-0	(.052)	7-6-5-4-4-1-1	(.199)
8-6-5-4-3-1-1	(.119)	7-7-6-3-3-1-1	(.092)	7-6-5-4-3-3-0	(.145)
8-6-5-4-2-2-1	(.159)	7-7-6-3-2-2-1	(.130)	7-6-4-4-4-3-0	(.174)
8-6-5-3-3-3-0	(.087)	7-7-6-2-2-2-2	(.178)	7-5-5-5-5-1-0	(.062)
8-6-5-3-3-2-1	(.199)	7-7-5-5-4-0-0	(.009)	7-5-5-5-4-2-0	(.132)
8-6-4-4-4-2-0	(.077)	7-7-5-5-3-1-0	(.033)	7-5-5-5-3-3-0	(.163)
8-6-4-4-4-1-1	(.135)	7-7-5-5-2-2-0	(.049)	7-5-5-4-4-3-0	(.199)
8-6-4-4-3-3-0	(.100)	7-7-5-5-2-1-1	(.087)	6-6-6-6-4-0-0	(.012)
8-5-5-5-5-0-0	(.009)	7-7-5-4-4-1-0	(.041)	6-6-6-6-3-1-0	(.043)
8-5-5-5-4-1-0	(.042)	7-7-5-4-3-2-0	(.074)	6-6-6-6-2-2-0	(.059)
8-5-5-5-3-2-0	(.076)	7-7-5-4-3-1-1	(.130)	6-6-6-6-2-1-1	(.105)
8-5-5-5-3-1-1	(.132)	7-7-5-4-2-2-1	(.178)	6-6-6-5-5-0-0	(.013)
8-5-5-5-2-2-1	(.179)	7-7-5-3-3-3-0	(.092)	6-6-6-5-4-1-0	(.059)
8-5-5-4-4-2-0	(.091)	7-7-4-4-4-2-0	(.090)	6-6-6-5-3-2-0	(.105)
8-5-5-4-4-1-1	(.159)	7-7-4-4-4-1-1	(.152)	6-6-6-5-3-1-1	(.181)
8-5-5-4-3-3-0	(.119)	7-7-4-4-3-3-0	(.106)	6-6-6-4-4-2-0	(.130)
8-5-4-4-4-3-0	(.135)	7-6-6-6-3-0-0	(.007)	6-6-6-4-3-3-0	(.160)
8-4-4-4-4-4-0	(.160)	7-6-6-6-2-1-0	(.020)	6-6-5-5-5-1-0	(.070)
7-7-7-5-1-1-0	(.005)	7-6-6-6-1-1-1	(.037)	6-6-5-5-4-2-0	(.147)
7-7-7-4-2-1-0	(.013)	7-6-6-5-4-0-0	(.011)	6-6-5-5-3-3-0	(.181)
7-7-7-4-1-1-1	(.023)	7-6-6-5-3-1-0	(.037)	6-5-5-5-5-2-0	(.175)